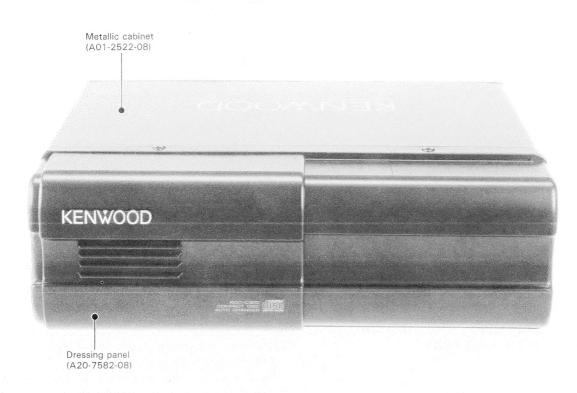
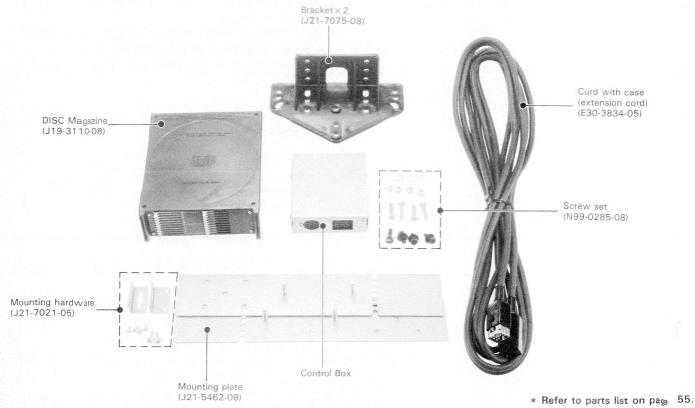
COMPACT DISC AUTO CHANGER

KDC-C300 SERVICE MANUAL

KENWOOD

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SERVICING NOTES

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.

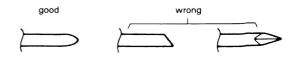
During repair, pay attention to electrostatic breakdown and also use the procedure in the printed matter which is included in the repair parts.

The flexible board is easily damaged and should be handled with care.

Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron at 270° ±10°C during repairing.
 - You can maintain the temperature of the soldering iron around 270°C by using the thermal controller as illustrated on the right.
- 2. Do not touch the soldering iron more than 4 seconds or 3 times on the same conductor of the circuit board.
- 3. Do not apply force on the conductor when soldering or unsoldering.

Tip of soldering iron



HOW TO SET A COMPACT DISC/CONNECTION

For more detailed connection method, please refer to the Instruction Manual supplied with the Compact Disc Auto Changer Control Unit. (If this unit is to be connected to other unit than the Controller, use the Control box unit ® supplied with this unit.)

To remove

Labeled surface

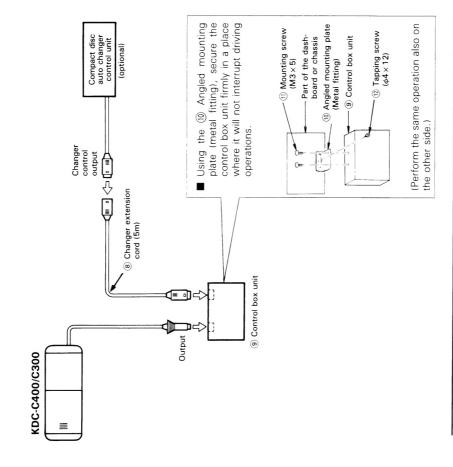
CABEL SURFACE

10 discs, one in each slot

2

CONNECTIONS

HOW TO SET A COMPACT DISC





EJECT switch

Disc magazine

4

To remove

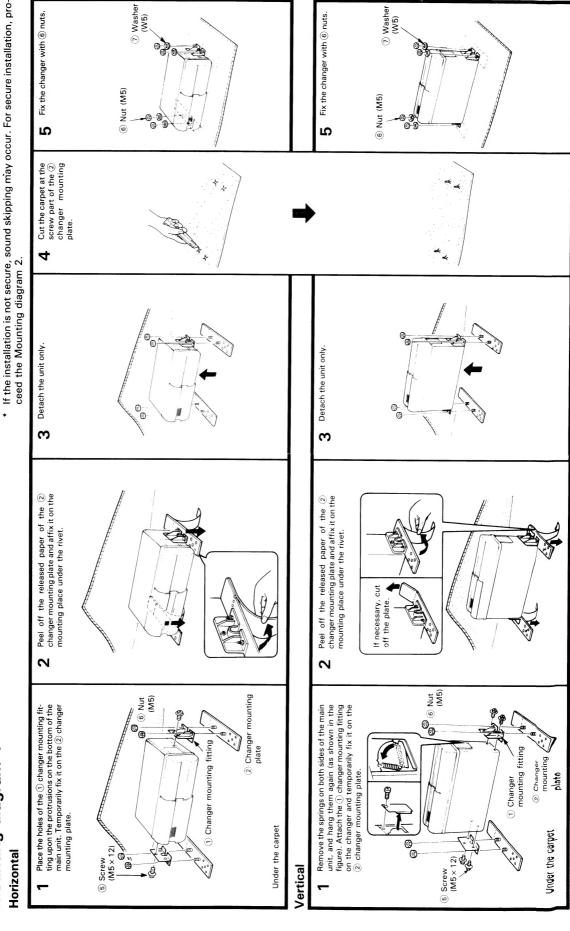
က

Do not install an antenna of radio equipment or distribute the antenna cable near the changer output cable, for this could cause malfunction with this unit.

Use the unit with the door closed Otherwise, foreign matter may enter the unit, and contaminate the lens in the player.

HOW TO INSTALL THE CHANGER

Mounting diagram 1



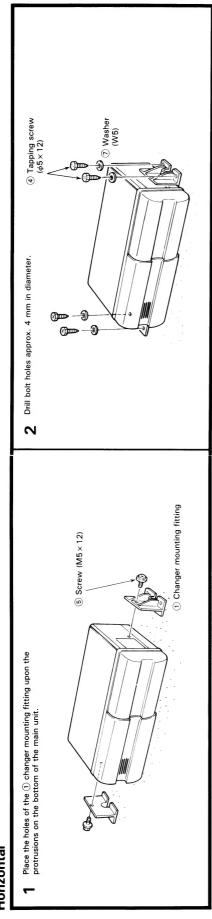
NSTALLATION

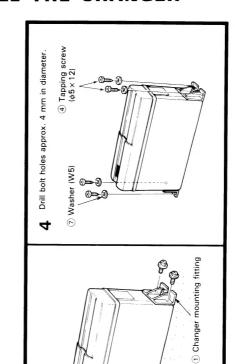
HOW TO INSTALL THE CHANGER

Mounting diagram 2

INSTALLATION







Screw (M5×12)

3

main unit, and hang them again (as shown in figure). Remove the springs on both sides of the

Vertical

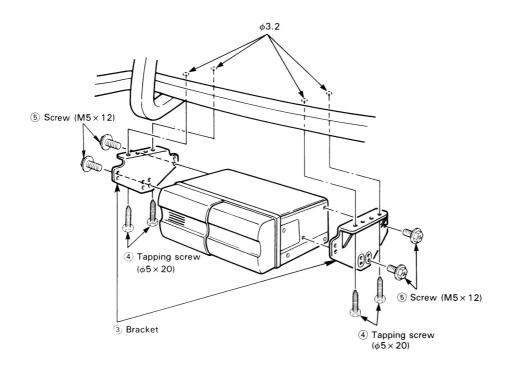
88

When making the hole, make sure not to damage the fuel tank, brake tube, writing harnesses, etc. on the other side.

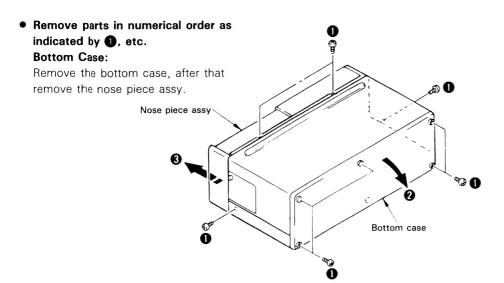
CAUTION

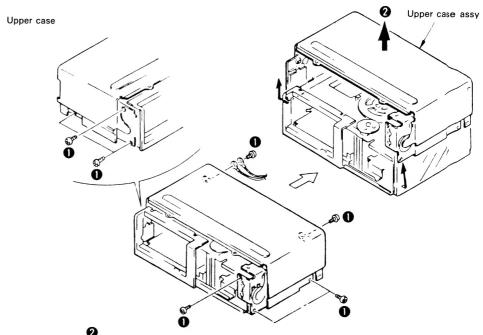
HOW TO INSTALL THE CHANGER

Mounting diagram 3 (In case of hanging in the trunk)



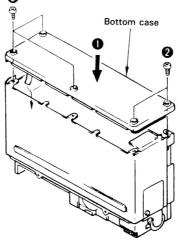
DISASSEMBLY FOR REPAIR





Precaution on assembling:

First install the bottom case, next the nose piece assy.

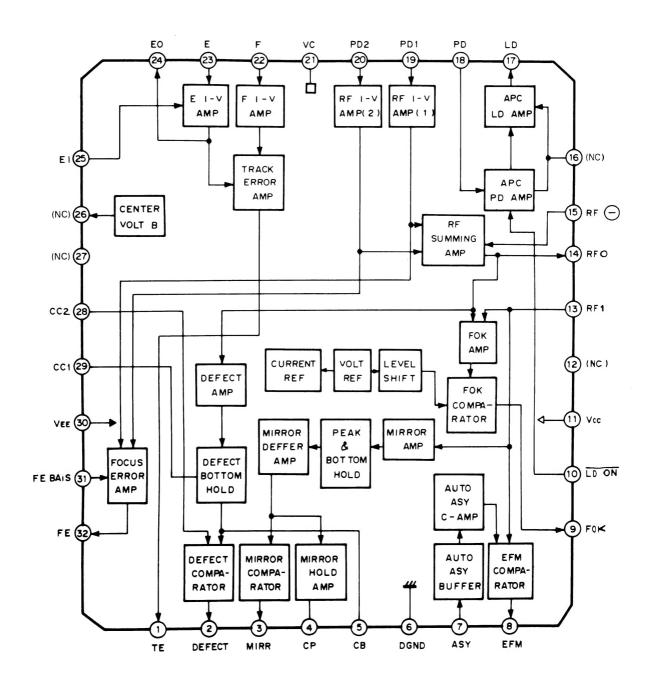


CIRCUIT DESCRIPTION

IC1: CXA1081Q RF amplifier

The CXA1081Q supplies the following functions as required for controlling the RF amp in the compact disc player.

- RF amp
- Focusing error amp
- Tracking error amp
- APC circuit
- Auto asymmetry control amp
- Focus OK detection circuit
- Mirror detection circuit
- · Defect detection circuit
- EFM comparator



CIRCUIT DESCRIPTION

Explanation of terminals

Terminal No.	Terminal name	I/O	Function
1	TE	0	Tracking error amp output pin.
2	DEFECT	0	Defect comparator output pin. (DC voltage: connected to a 10 k Ω load).
3	MIRR	0	Mirror compartor output pin. (DC voltage: connected to a 10 k Ω load).
4	СР	1	Mirror hold capacitro output pin. Mirror comparator non-invert input.
5	СВ	1	Defect bottom hold capacitor connect pin.
6	DGND	_	Connected to GND when using a positive (+)/negative (-) dual-voltage power supply. Connected to GND (VEE) when using a single-voltage power supply.
7	ASY	1	Auto asymmetry control input pin.
8	EFM	0	EFM comparator output pin. (DC voltage: connected to a 10 $k\Omega$ load).
9	FOK	0	FOK comparator output pin. (DC voltage: connected to a 10 $k\Omega$ load).
10	LD ON	1	LD ON/OFF select pin. (DC voltage: when LD ON).
11	Vcc		Positive power supply.
13	RFI	1	Input pin of the C-coupled signal output from the RF summing amp.
14	RFO	0	Check point of eye pattern for the RF summing amp output pin.
15	RF ⊖		RF summing amp feedback input pin.
16	N.C.	_	
17	LD	0	APC LD amp output pin. (DC voltage: PD open in N-sub mode)
18	PD	1	APC PD amp input pin. (DC voltage: open)
19	PD1	- 1	RF I-V amp (1) invert input pin. Current input by connecting to PIN diode A+C.
20	PD2	- 1	RF I-V amp (2) invert input pin. Current input by connecting to PIN diode B+D.
21	VC	_	Connected to GND when using a positive (+)/negative (-) dual-voltage power supply. Connected to VR (pin 14) when using a single-voltage power supply.
22	F	1	F I-V amp invert input pin. Current input by connecting to PIN diode F.
23	Е	ı	E I-V amp invert input pin. Current input by connecting to PIN diode E.
24	EO	0	E I-V amp output pin.
25	EI	- 1	E I-V amp feedback input pin. For E I-V amp gain adjustment.
26	N.C.	-	
27	N.C.	MARKET .	
28	CC2	1	Input pin of the C-coupled signal output from the defect bottom hold.
29	CC1	0	Defect bottom hold output pin.
30	Vee	_	Connected to the negative power supply when using a positive (+)/negative (-) dual-voltage power supply. Connected to GND when using a single-voltage power supply.
31	FE BIAS	1	Bias pin at the focus error amp non-invert side. For CMR adjustment of the focus error amp.
32	FE	0	Focus error amp output pin.

CIRCUIT DESCRIPTION

IC2: CXA1182Q Servo signal processor for the CD

General

The CXA1082AQ is a bipolar IC developed for servo control in Compact Disc players.

Features

- Operates on a signal +5 V power supply as well as on a ±5 V dual-voltage power supply.
- Low power consumption (165 mW with ±5 V, 100 mW with +5 V).
- Same servo function as CX20108 (focusing, tracking, sled servo)
- Built-in auto sequencer.
- · Built-in spindle servo LPF.
- Built-in loop filter and VCO for an EFM clock generating PLL.
- A minimum of external parts required.
- Sled overrun prevention circuit.
- · Disc defect treatment circuit.
- Anti-shock circuit
- Linear motor feed for high-speed access.

- Shared use of a serial data bus with the CX23035 and CXD1135Q.
- The microprocessor and software both have upward compatibility with the CX20108.
- The pulse height of the focusing search, track jump, and sled kick can be set with externally connected resistors.

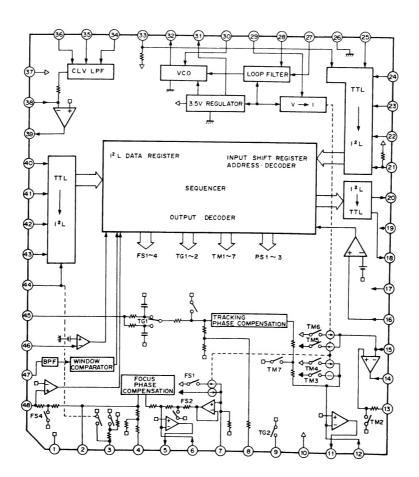
Functions

- Focusing servo control
- Tracking servo control
- Sled servo control
- Spindle servo Low Pass Filter, drive amplifier
- EFM clock generating PLL Loop filter: 8.64 MHz VCO
- Auto sequencer
 Incorporating a RAM

Structure

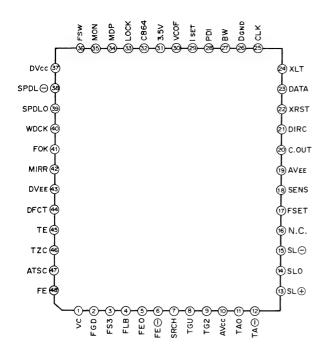
Bipolar silicon monolithic IC

Block diagram



CIRCUIT DESCRIPTION

Pin configuration



Terminal explanations

Terminal No.	Terminal name	Function
2	FGD	To lower the high frequency gain of the focus servo, insert a capacitor between this pin and pin 3.
3	FS3	The high frequency gain of the focus servo is selected by switching FS3 ON/OFF.
4	FLB	Time constant external connect pin, for boosting the focus servo low frequencies.
5 11 14 39	FEO TAO SLO SPDLO	Power transistor drive op amplifier output pins.
6	FE⊝	Focus amplifier inverted input pin.
7	SRCH	Time constant external connect pin, for creating the focus search waveform.
8	TGU	Time constant external connect pin, for selecting the tracking high frequency gain.
9	TG2	Time constant external connect pin, for selecting the tracking high frequency gain.
12	TAO	Tracking amplifier inverted input pin.
13	SL⊕	Sled amplifier non-inverted input pin.
15	SL⊖	Sled amplifier inverted input pin.

Terminal No.	Terminal name	Function
16	N.C.	_
17	FSET	Setting pin for the focus tracking phase peak value compensation, and fo of the CLV LPF.
18 20	SENS C.OUT	Output pins for an interface with a microprocessor.
21 22 23 24 25 33	DIRCT XRST DATA XLT CLK LOCK	Input pins for an interface with a microprocessor. A 47-kohm pull-up resistor is only incorporated in pins 21 and 33.
27	BW	Loop filter time constant external connect pin.
28	PDI	Input pin for the phase comparator output PDO of CXD23035/CXD1135.
29	ISET	Inputs a current which determines the level of the focus search, track jump, and sled kick.
30	VCOF	The self-advancing frequency of the VCO is almost proportional to the resistance between this pin and pin 31.
32	C864	8.64 MHz VCO output pin.
34	MDP	CXD23035/CXD1135 MDP pin connect pin.
35	MON	CXD23035/CXD1135 MON pin connect pin.
36	FSW	LPF time constant external connect pin, for the CLV servo error signal.
38	SPDL⊖	Spindle drive amplifier inverted input pin.
40 41 42 44	WDCK FOK MIRR DFCT	Input pins for an interface with a microprocessor.
45	TE	Tracking error signal input pin.
46	TZC	Tracking zero-cross comparator input pin.
47	ATSC	Window comparator input pin for ATSC detection.
48	FE	Focusing error signal input pin.

CIRCUIT DESCRIPTION

Explanation on the Functions of the Terminals of IC503 CX7991

Terminal No.	Explanation on Terminal
1~8	Parallel output terminal which takes in and outputs the condition of the internal register in the strobe signals. When the set signal is entered, it outputs "1"; when the reset signal is entered, it outputs "0".
9,11~13	Parallel output terminal which takes in and outputs the condition of the internal register in the strobe signals. When the set or reset signal is entered, the outputs is in the high impedance and the unit is in the output condition with the strobe signals.
14	Serial data output terminal.
15	Set signal input terminal which is "L" active. When this terminal is set to "L", the latch is set regardless of the condition of the internal register, and the unit outputs "1" to the terminals $1 \sim 8$, and the terminals 9 , $11 \sim 13$ are in high impedance.
16	Reset signal input terminal which is "L" active. When this terminal is set to "L", the latch is set regardless of the condition of the internal register, and the unit outputs "0" to the terminals $1 \sim 8$, and the terminals 9 , $11 \sim 13$ are in high impedance.
17	Strobe signal input terminal which is "H" active. When this terminal is set to "H", the condition of the internal register is transferred to latch.
18	Serial data input terminal which inputs the serial date from an external unit.
19	Clock signal input terminal which takes in the data at start-up.
10	GND
20	Power source

MECHANISM DESCRIPTION

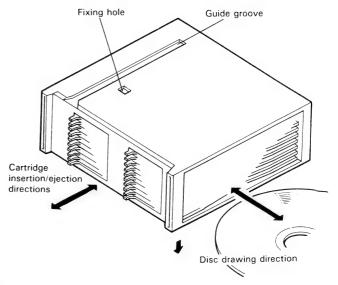
1. Structure of mechanism

Roughly speaking, the mechanism consists of the following four sections

- (1) Section which loads, ejects and holds the cartridge.
- (2) Section which pulls out a disc from the cartridge and places it above the spindle motor. (This part also performs cartridge unloading, which consists of returning the disc to the specified position in the cartridge.)
- (3) Section which moves up/down the section mentioned in (2), in order to place the disc on the turntable and to move it to the specified position of the cartridge when unloading it
- (4) Section consisting of the sled motor, spindle motor and pickup used for playing the disc.

2. Cartridge loading and ejection operations

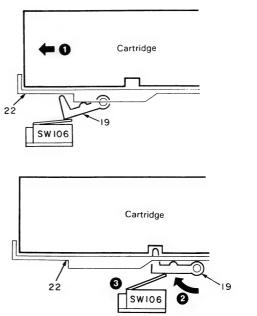
A guide groove and a square hole are located on the bottom side of the cartridge.



(1) When the cartridge is inserted, the projection on the mechanism (roller) is applied on the guide groove, guided by it and pushed in (1).

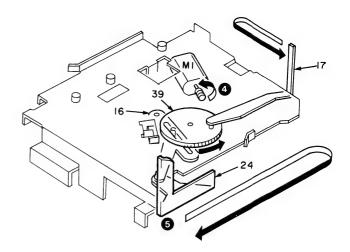
When the projection is pushed in until the specified position, its hook is engaged with the position of the fixing hole so the cartridge is fixed (2).

The cartridge insertion is a manual operation, and it is fixed by the hook which is moved up when the lever (22) is pushed. When the hook moves up, it turns ON a switch (SW106) interlocked with it and the presence of the cartridge is detected by the switch (3).



MECHANISM DESCRIPTION

When the switch (SW106) is turned ON for the first time, the motor (M1) rotates once in the CW direction (4). This CW rotation of the motor (M1) causes the lever (16), which is used to place the disc completely inside the cartridge, to reciprocate once in front of the disc drawing slot on the cartridge (5).



(2) The cartridge ejection is performed by the CCW rotation of the motor (M1) (6). The motor rotation is transmitted to the cam (44) (7), the hook (19) is disengaged from the fixing hole on the cartridge by the movement of the cam surface (8), a force in the ejection direction is applied to the lever (22) by the Lever Ass'y (18) interlocked with the cam (9), and the cartridge is pushed out (10).

Functions of the motor and switches

Motor (M1): CW rotation moves the lever used to

place the disc completely in the car-

tridge.

Switch (SW105): Detects the home position of the lever

(16) by means of the cam (39).

Motor (M1): CCW rotation rotates the cam (44)

used to push out the cartridge and dis-

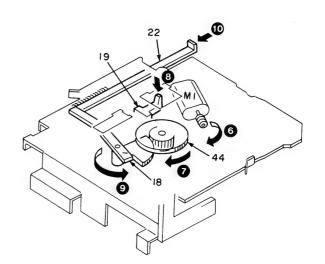
engage the hook.

Switch (SW106): Detects the presence of cartridge

(LOADING/EJECT).

Switch (SW107): Detects the home position of the ejec-

tion cam.

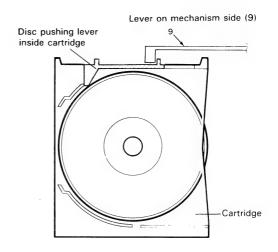


MECHANISM DESCRIPTION

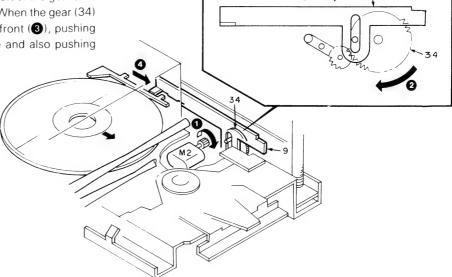
3. Disc loading and ejection with respect to the cartridge

A lever for pushing out the disc is located inside the cartridge, and two sections of the lever are projected outside the car-

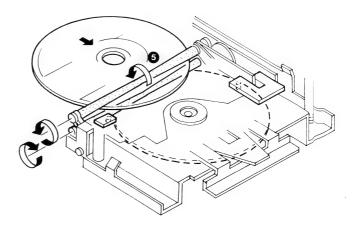
The lever (9) is placed in front of one of the projections. However, it can also move up/down when all discs are inside the cartridge or when a disc has been loaded on the mechanism.



For loading a disc on the mechanism, the motor (M2) rotates (1), also rotating the gear (34) (2). The shaft of the gear (34) is inserted in the long hole on the lever (9). When the gear (34) rotates, the lever (9) is pushed toward the front (3), pushing the disc pushing lever inside the cartridge and also pushing the disc toward the front (4).



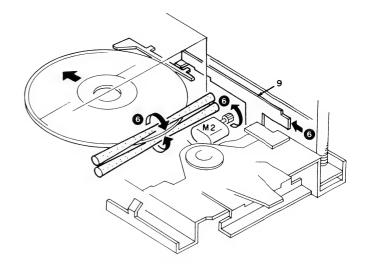
By means of a pair of rollers inside the mechanism which are rotated by the motor (M2), the disc is transported to the specified position with the same procedure as the KDC-80 and 90R **(5**).

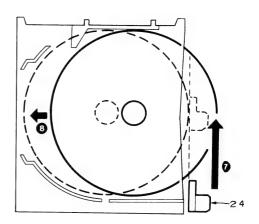


MECHANISM DESCRIPTION

The disc is ejected from the mechanism to the cartridge in the reverse way to the above operations (6). However, the lever (9) on the mechanism side moves only in one direction so it cannot return the disc pushing lever inside the cartridge. The disc pushing lever is returned by the disc itself. At the final stage on the rollers, it is pushed into the final position by the lever provided on the opening surface of cartridge (7) (8).

(Motor (M1) = CW, slider ass'y (24) moved)



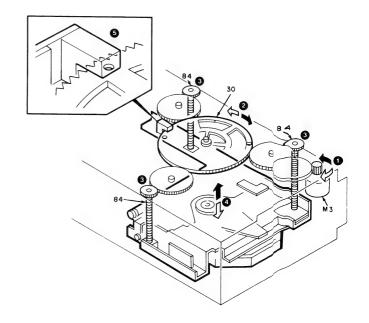


4. Up/down movement of loading mechanism

The initial position of the loading mechanism is the PLAY position, with which the disc is placed on the spindle.

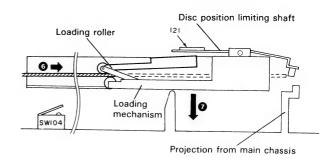
The whole of the mechanism is moved up/down by the motor (M3) (11), the rotation of which is transmitted through the gear (62) (2), and to the 3 screws (84) (3) (4).

The loading positions of the 10 discs are detected by detecting the 2 holes of the gear (30) (5). (Motor (M3) CCW→holes detected).



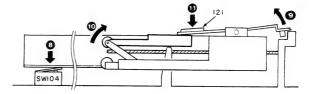
MECHANISM DESCRIPTION

After the disc is loaded in the specified position (6), the loading mechanism moves down (2), and enters the PLAY condition when the switch (SW104) is turned ON (8). At this time, the disc insertion position limiting shaft (9) and roller are separated up and down from the disc (16).

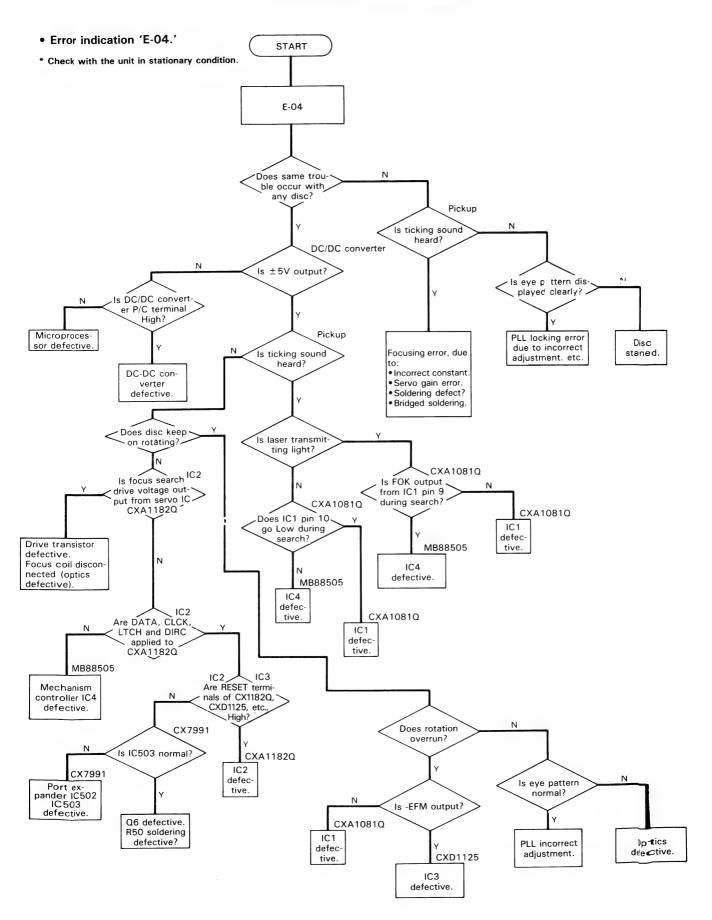


The actual playback becomes possible when the plate (121) is attracted magnetically to the turntable on the spindle motor. For ejecting the disc, the loading mechanism is moved up by the loading and empty operation. The cartridge position is detected when the switch (SW102) is turned ON.

The optics system design such as the disc spindle is the same as the KDC-80 and 90R including the constants used.



TROUBLESHOOTING



ADJUSTMENT

[LARGE ELEVATOR GEAR POSITION (LOCATION 10.5) ADJUSTMENT]

1. Move the middle elevator gear in the arrowed direction and place the top plate at the position where there are no clearances between the bottom face of the top plate and the top edges of the three claws.

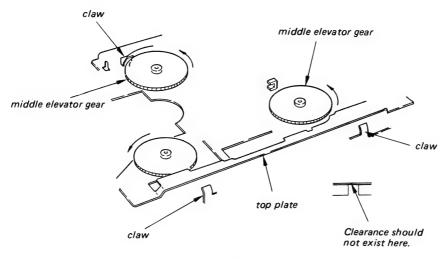
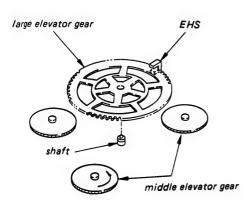
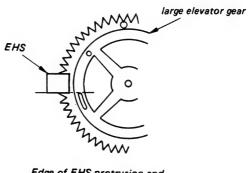


Fig. 1

- 2. Put the large elevator gear on the shaft of the top plate taking care not to move the middle elevator gears. The large elevator gear should be fastened by the top plate and EHS protrusion and should position in the relationship with the EHS as shown in Fig. 1
- 3. After the placing, fix the large elevator gear with a retaining ring.

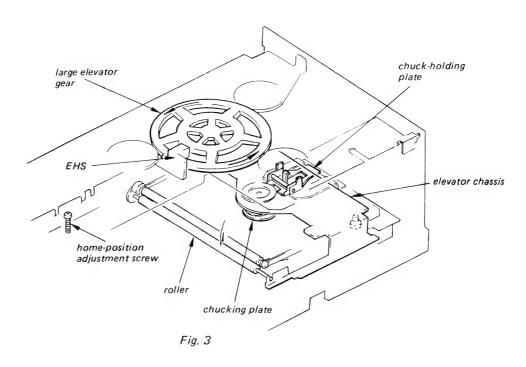




Edge of EHS protrusion and edge of protrusion on the large elevator gear should be aligned as shown.

ADJUSTMENT

[HOMING ADJUSTMENT]



- 1. Put the disk magazine containing several disks in the changer.
- 2. Initialize the changer.
- 3. Pull off the first disk.
- 4. Wait until the elevator lowers down to the home position.
- 5. Move the large elevator gear so that the clearance between the inner edge face of the chucking plate and edge of the top face of the stainless chuckholding plate becomes in 1.5 mm (1/16 inches) as shown in Fig. 4.
- 6. Make a dot marking on the large elevator gear as shown in Fig. 5.
- 7. Re-put the first disk in the disk magazine.
- 8. Pull off the first disk again. The dot marking made in the step 6 above should position as shown in Fig. 5.
- 9. Fine adjust the position of the large elevator gear with the home-position adjustment screw shown in Fig. 3.

Adjustment Screw Position	Large Elevator Gear Position Displacement
One (1) turn in clockwise	15 (fifteen) degrees clockwise
One (1) turn in counterclockwise	15 (fifteen) degrees counterclockwise

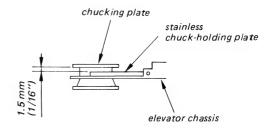
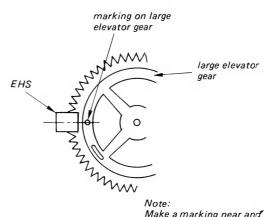


Fig. 4



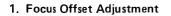
Make a marking near and on the center line of the EHS sensor.

Fig. 5

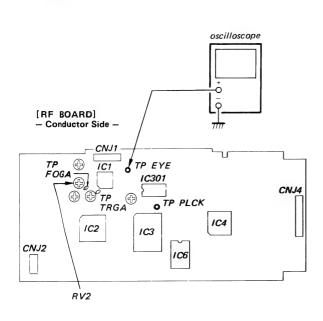
ADJUSTMENT

- 1. Perform adjustments as given.
- 2. Be sure to use the disc "YEDS-18"

- 3. Unsolder the small shield plate from the RF board.
- 4. Power supply voltage: DC 14.4 V (more than 2A).



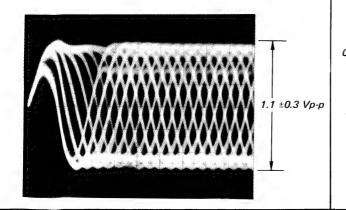
Procedure:



- 1. Connect the oscilloscope to RF board test point [EYE].
- 2. Put the set into play mode by loading the disc.
- 3. Adjust main board RV2 so that the oscilloscope / waveform eye pattern is good.

A good eye pattern means that the diamond shape (\Diamond) in the center of the oscilloscope can be clearly distinguished.

Volt/Div: 200 m V Time/Div: 0.5 μSec



2. Tracking Offset Adjustment

RV1

Procedure:

Oscilloscope

[RF BOARD]

- Conductor Side –

CNJ1

TP EYE

FOGA

IC301

CNJ4

TRGA

OTP PLCK

IC4

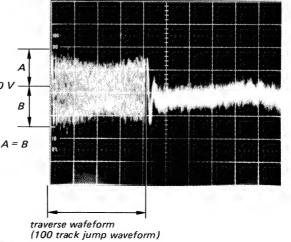
CNJ2

IC5

IC6

- 1. Connect the oscilloscope to RF board test point TRGA, pin (1) of IC1.
- 2. Put the set into play mode by loading the disc.
- Press the |◄◄ or ►►| (or ◄◄, ►►) button, then check the traverse waveform*.
- 4. Adjust RV1 (main board) so that oscilloscope reading is symmetrical in relation to 0 V.
 - *Traverse waveform: This is the tracking error waveform appears when crossing the track.

Volt/Div: 0.5 V Time Div: 2 mSec Center 0 V



ADJUSTMENT

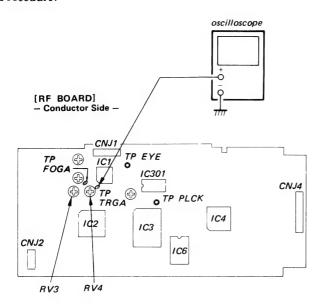
3. Tracking Gain Adjustment (coarse adjustment)

This adjustment is to be performed when replacing the following parts.

- Optical Pick-up Block
- RV4

This adjustment should be performed after focus offset and tracking offset adjustments are completed.

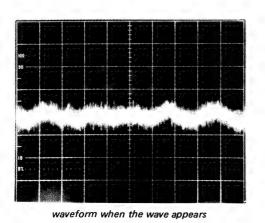
Procedure:



- 1. Connect the oscilloscope to RF board test point TRGA.
- 2. Put the set into play mode by loading the disc.
- 3. Turn RF board RV4 from clockwise stop, then check the oscilloscope waveform.

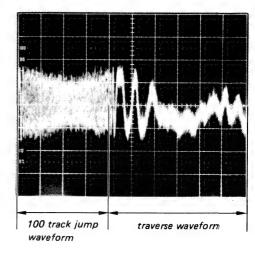
Fix RV4 at the position where the waveform disappears.

Volt/Div: 0.5 V Time/Div: 2 mSec



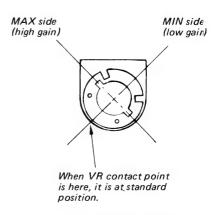
• When gain is lowered . . .

When selecting by pressing | $\blacktriangleleft \blacktriangleleft$ or $\blacktriangleright \blacktriangleright$ | button, brake application is poor because of low tracking gain. Therefore, the traverse waveform appears after the 100 track jump waveform, then the selection will be located slowly.

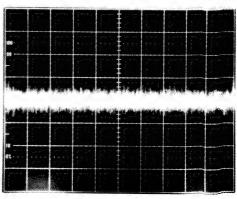


• When gain is highered . . .

Operation noise is heard due to a scratch or dust, then operation will be instability.



RV3 standard position



waveform when the wave disappeard

ADJUSTMENT

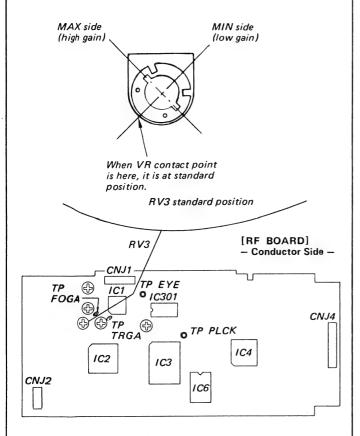
4. Focus Gain Adjustment (coarse adjustment)

This adjustment is to be performed when replacing the following parts.

- Optical Pick-up Block
- RV3

Procedure:

- 1. Set RV3 (RF board) to the standard position.
- Check that there is not an abnormal amount of operation noise (white noise) from the 2-axis devise. If there is, turn RV3 slightly clockwise.



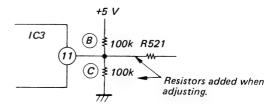
- When gain is highered...

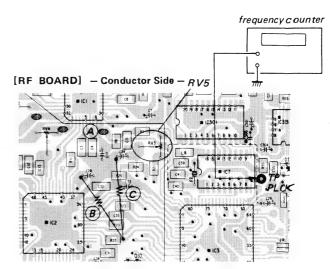
 The set does not play because of no focus opera-
- When gain is highered . . .
 Operation noise is heard due to a scratch or a dust, then operation will be unstable.

5. PLL Freerun Frequency Adjustment

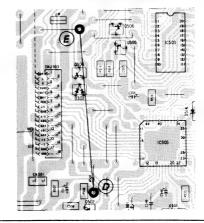
Procedure:

- 1. Unsolder the solder bridge at (A).
 (IC3 pin (5) is opened)
- 2. Connect 100 k Ω resistors to B , C . (This is to set the IC3 pin $\fbox{11}$ voltage to 2.5 V)
- 3. Install a test jumper wire between (D) and (E) on the jack board to pull up the P/C terminal of the DC-DC converter (-).
- 4. Connect the frequency counter to RF board test point PLCK (IC3 pin 70).
- 5. Turn the power switch on (Do not use the disc), then adjust RV5 so that the frequency is $4.3218 \ MHz \pm 10 \ kHz$.
- 6. After adjusting, reset 1, 2 and 3 as original.





[JACK BOARD] - Conductor Side -



DD1

VOLTAGE TABLES

RF BOARD

IC1	
2	- 4.1V
4	- 0.3V
5	- 0.7V
7	2.4V
8	2.4V
9	4.8V
11	5V
14	0.8V
17	3.2V
18	- 4.9V
24	- 0.6V
30	- 5.1\/

IC2	
5 7	0.3V
	0.7V
10	5V
17	- 4V
18	4.8V
19 21	- 5.1V
21	5V
22	4.9√
23	4.8V
24	5V
25	5V
27	1.9V
28	2V
29	2.2V
30	2.3V
31	3.6V
32	2.2V
33	5V
34	2.4V
35	4.9V
36	2.5V
37	5V
39	0.4V
43	- 5.1V

3	
2	4.9V
3	2.4V
4	2.8V
4 5 6	2.4V
6	2.5V
7	5V
8	2.4V
9	2.1V
11	1.7V
13	5V
14	5V
15	4.8V
16	4.9V
17	0.1V
18	4.8V
20	5V
23	1.5V
24	0.1V
25	2.5V
28	5V
29~32	1.8V
33	5V
34~37	1.8V
39~48	2.5V
49	4.4V
50	2.7V
51	2.3V
53	2.2V
56,57	5V

12~16	5V
18	5V
20~25	4.9V
26	5V
27~29	4.9V
31	4.9V
32	5V
33~35	4.8V
36	2.3V
38	4.9V
44	2.5V
45	1.5V

25	
1	4.6V
3	0.3V
4,5	- 5.1V
6	- 0.3V
11	- 0.1V
12,13	- 5.1V
14	0.1V

1~8	2.5V
9~17	1.8V
18	2.6V
19	2.5V
20	2.6V
21	4.4V
22,23	2.5V
24	5V

1	1.9V
4	4V
6,7	2.5V
9	2.3V
14	4V
20	1.9V
C302	0.51
1	
C302	0.5V 0.5V - 5V

1	- 0.6V
4	- 5V
7	- 0.6V
8	4.9V

1	14.3V
3,4	0.4V
6	0.1V
7	14.3V
8	0.4V
9,10	0.4V
12	0.1V

1	4.9V
2	5V
IC503	
9	4.8V
15	5.3V
16	4.8V

IC502

IC505	
1	4.9V
2	5V
3	4.9V
5~11	4.9V
13~15	4.9V
17	5V
18	2.4V
21	5V
24,25	4.9V
26,27	0.1V
28	0.2V
29	0.1V
30	0.5V
31	0.1V
32	0.3V
40,41	5V

Q 1	
E	3.9V
С	1.8V
В	3.2V

Q2

E C B	- - 5V 0.3V
QЗ	
Ω3	
	4.6V

E	_
С	- 5V
В	

Q9	
E	-
С	_
В	2.6V

Q10	
Е	2.6V
С	_
В	_

Q101	,201
E	_
С	_
В	- 4.4V

Q301	
E	5V
С	-4.4V
В	4.7V

Q302	2
Ε	_
С	4.7V
В	_

Е	14.4V
C	14.4V
В	_

	4.4V
Q305	;
Е	-
С	0.01V
В	14.4V

C	150	2	
Γ	Е	5V	
Г	С	_	
	В	_	

Q50!	5,506	
E	5V	7
С	5V	
В	4.8V	

Q511		
Ε	0.3V	7
C	OV	
В	0.3V	



Q513	
E	-
С	0.3V
В	-

/

Q516	5
E	-
С	_
В	0.7V
Ω517	,

E C B	0.1V 0.1V
_ D	
Q518)
Ε	_
С	-
В	1.6V

E	0.1V
С	0.1V
В	

E	_
СВ	-
В	0.6V
Q524	
	5V
Q524 E C	5V 5V

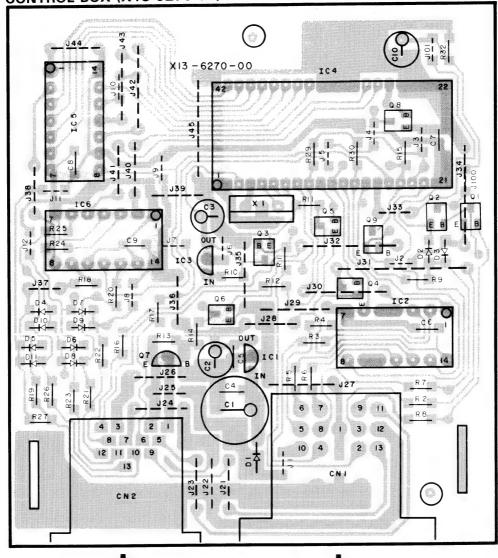
Q704			
Ε	-		
С	0.01V		
В	4.9V		

Q705		
E	14.4V	
С	14.3V	
В	13.6V	

(Q707		
ſ	E	5.4V	
	С	14.3V	
ſ	В	6V	

CONTROL BOX (X13-6270-00)

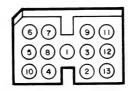
2





to CD CHANGER

-	ACC	
2	B-UP	
3	D · GND	
4	DISP	
5	Rch	
6	CD RST	
7	GND	
8	MUTE	
9	Lch	
10	DATA IN	
Ξ	DATA OUT	
12	CLK IN	
13	CLK OUT	



to CONTROL UNIT

10	CONTROL ONLY	
1	GND	
2	RST	
3	MUTE	
4	REQ UNIT	
5	DATA IN	
6	DATA OUT	
7	REQ IN	
8	CLK	
9	CD CON	
10	B-UP	
11	Rch	
12	GND	
13	Lch	
	-	

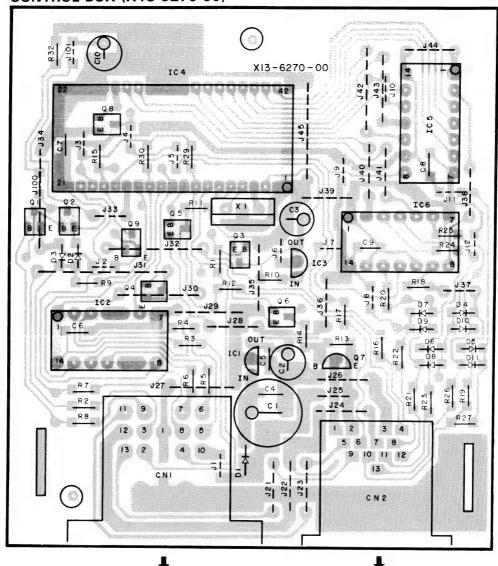
CONTROL BOX

Ref. No.		Address
IC	Q	Audiess
	1	2D
	2	2D
	Q 1 2 3 4	2D 3C
	4	3C
	5	3C
	6	3B
		3B
	7 8	2D
	9	3C
1		3C
2		3D
3		3B
1 2 3 4		2C
5		2B
6		3B

Refer to the schematic diagram for the values of resistors and capacitors .

PC BOARD (Foil side view) (1/3)

CONTROL BOX (X13-6270-00)



to CONTROL UNIT

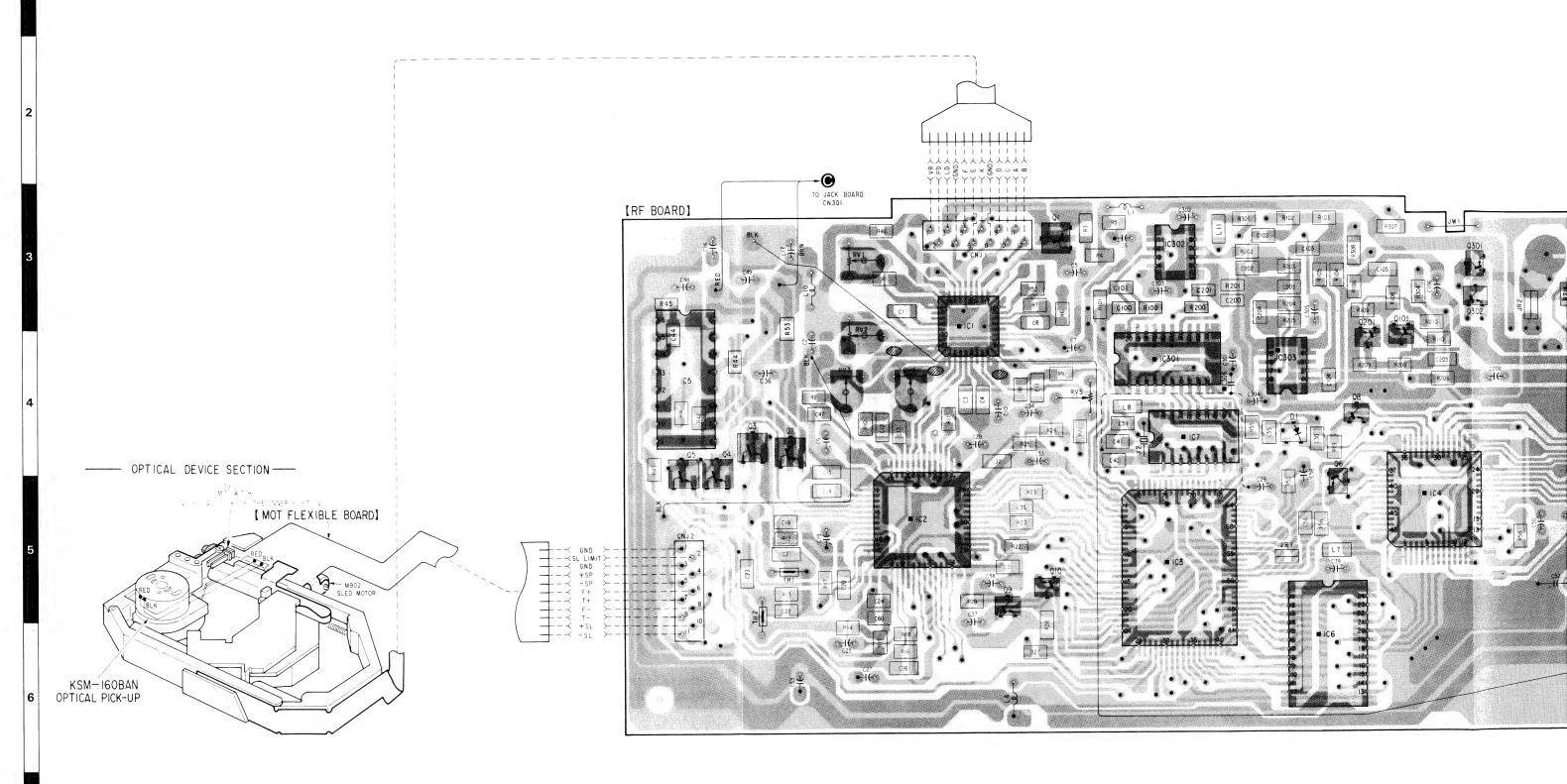
	GND	
2	RST	
3	MUTE	
4	REQ UNIT	
5	DATA IN	
6	DATA OUT	
7	REC IN	
8	CLK	
9	CD CON	
9	B-UP	
Ξ	Rch	
12	GND	
13	Lch	

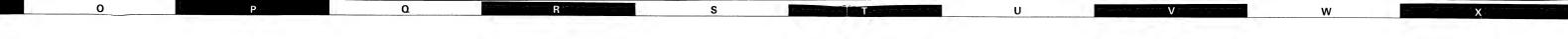
to	CD CHANGER	
1	ACC	
2	B-UP	
3	D · GND	
4	DISP	
5	Rch	
6	CD RST	
7	GND	
8	MUTE	
9	Lch	
10	DATA IN	
11	DATA OUT	
12	CLK IN	
13	CLK OUT	

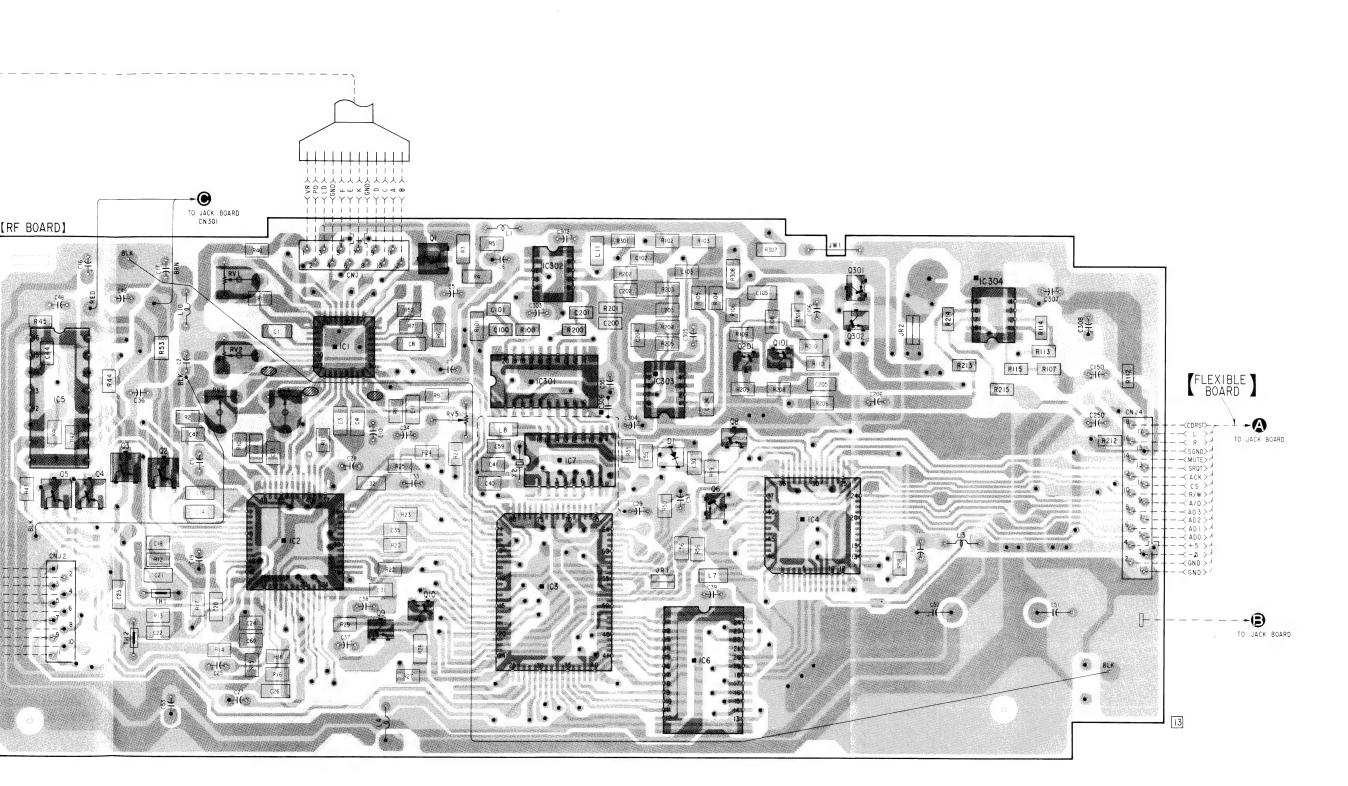
CONTROL BOX

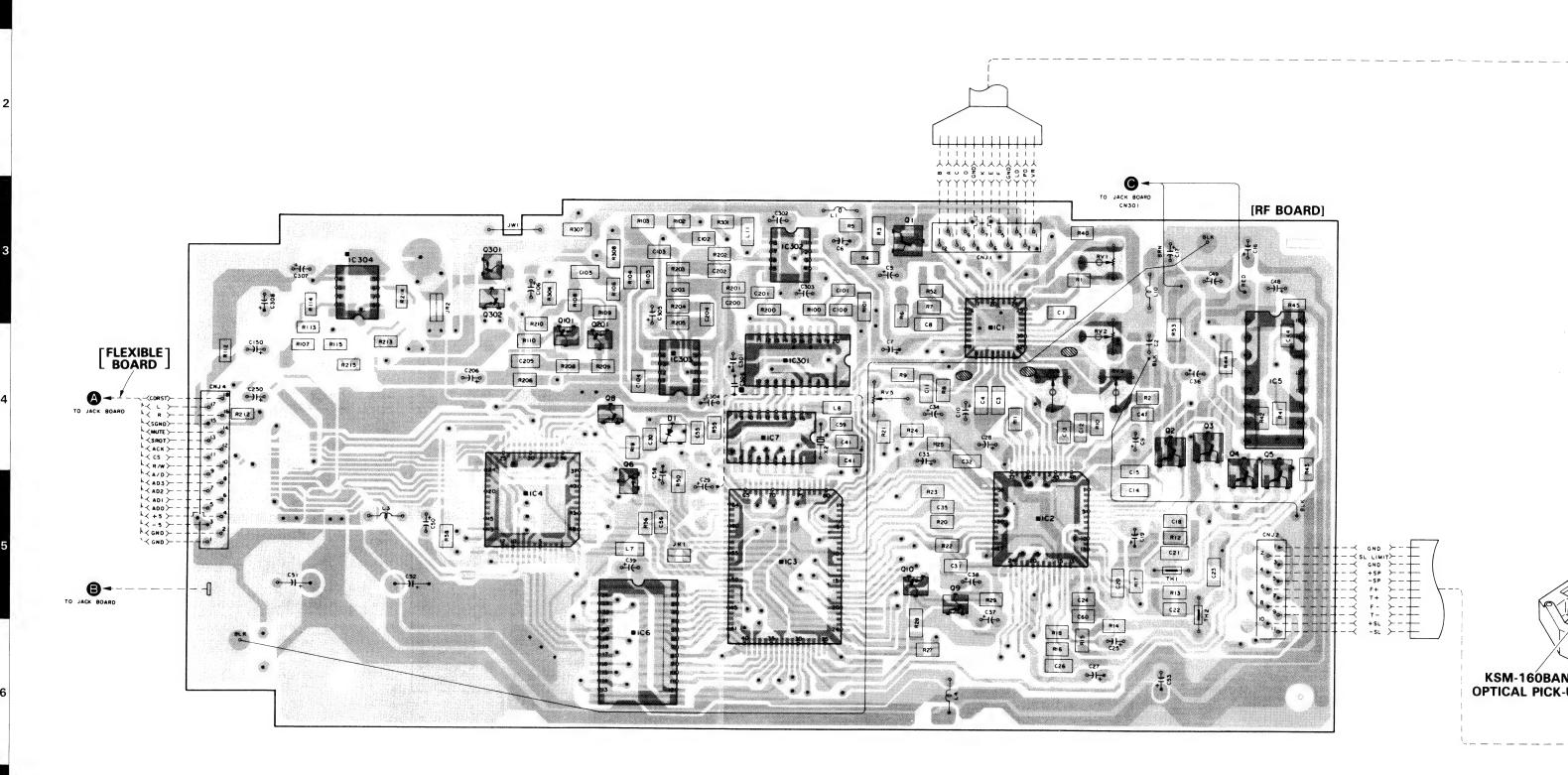
Ref. No.		Addres	
IC	Q	Addres	
	1	2G	
	2 3	2G	
		3H	
	4	3G	
	5	2G	
	6	3H	
	7	31	
	8	2G	
	9	3G	
1		3H	
2		3G	
3		3H	
2 3 4 5		2G	
5		21	
6		31	

PC BOARD (Component side view) (2/3)



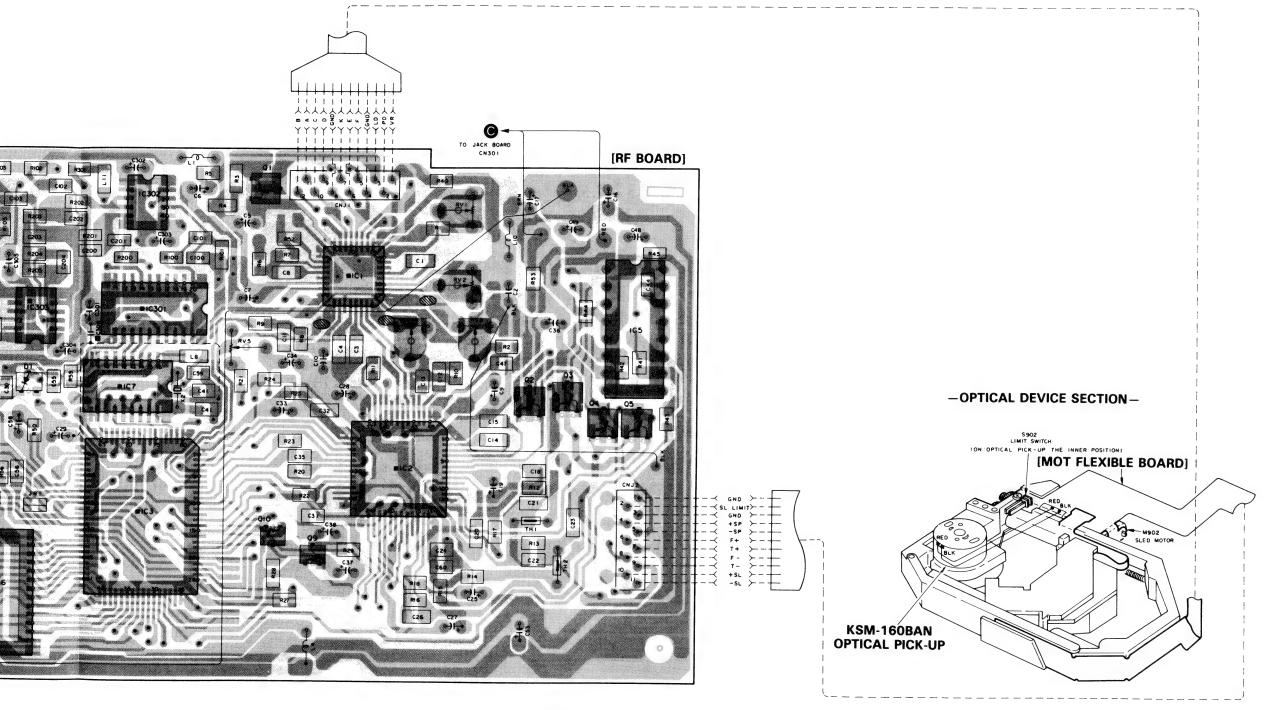




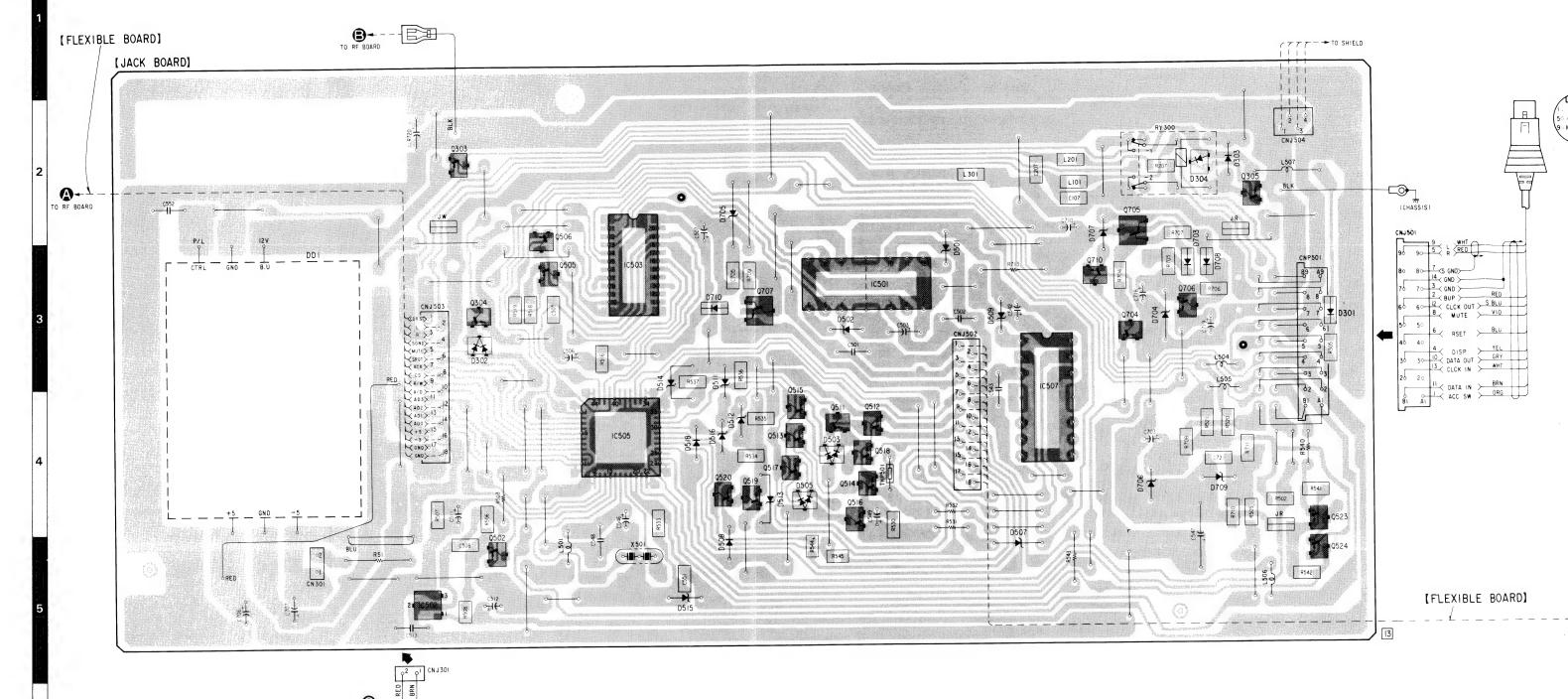


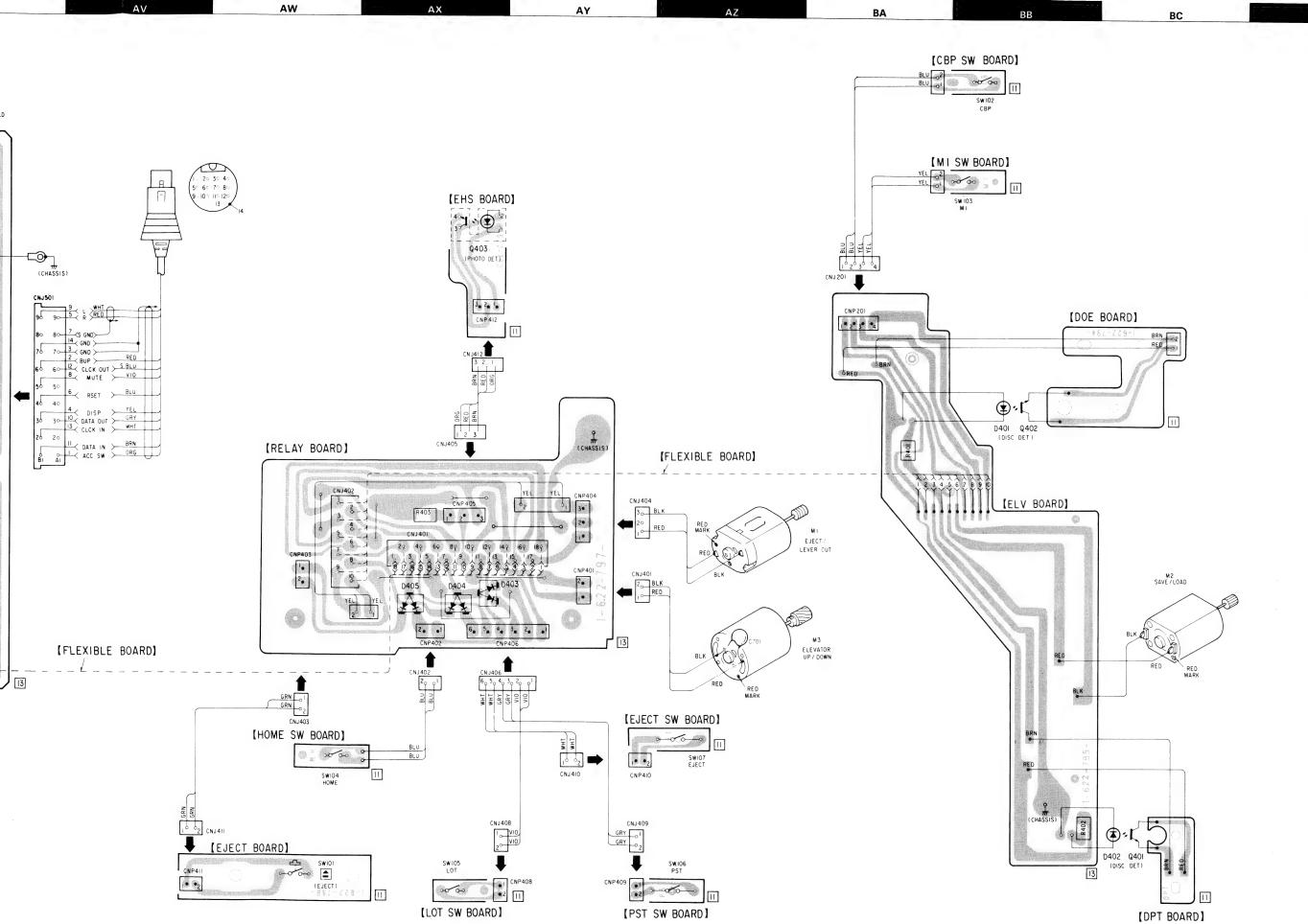




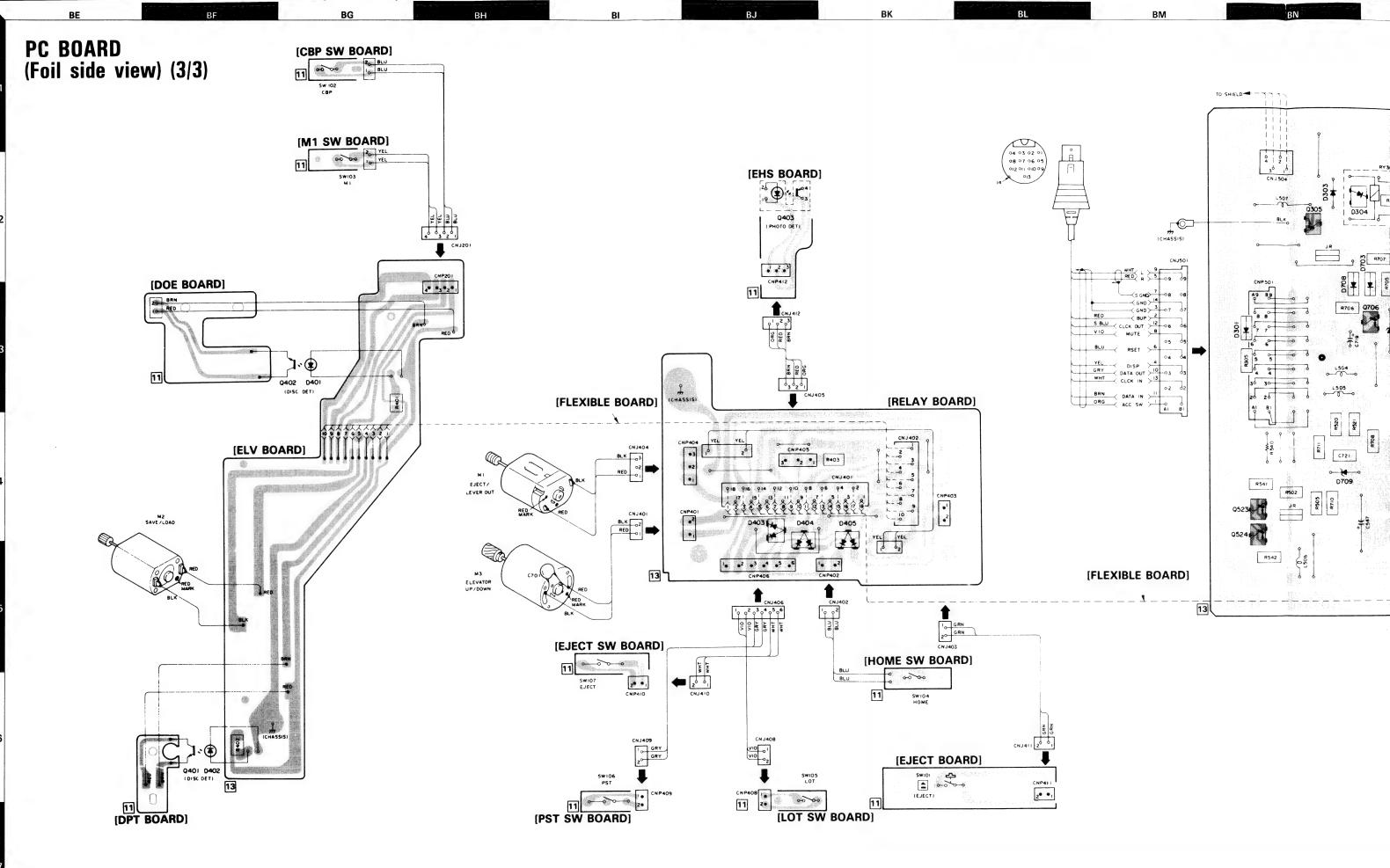


PC BOARD (Component side view) (3/3)

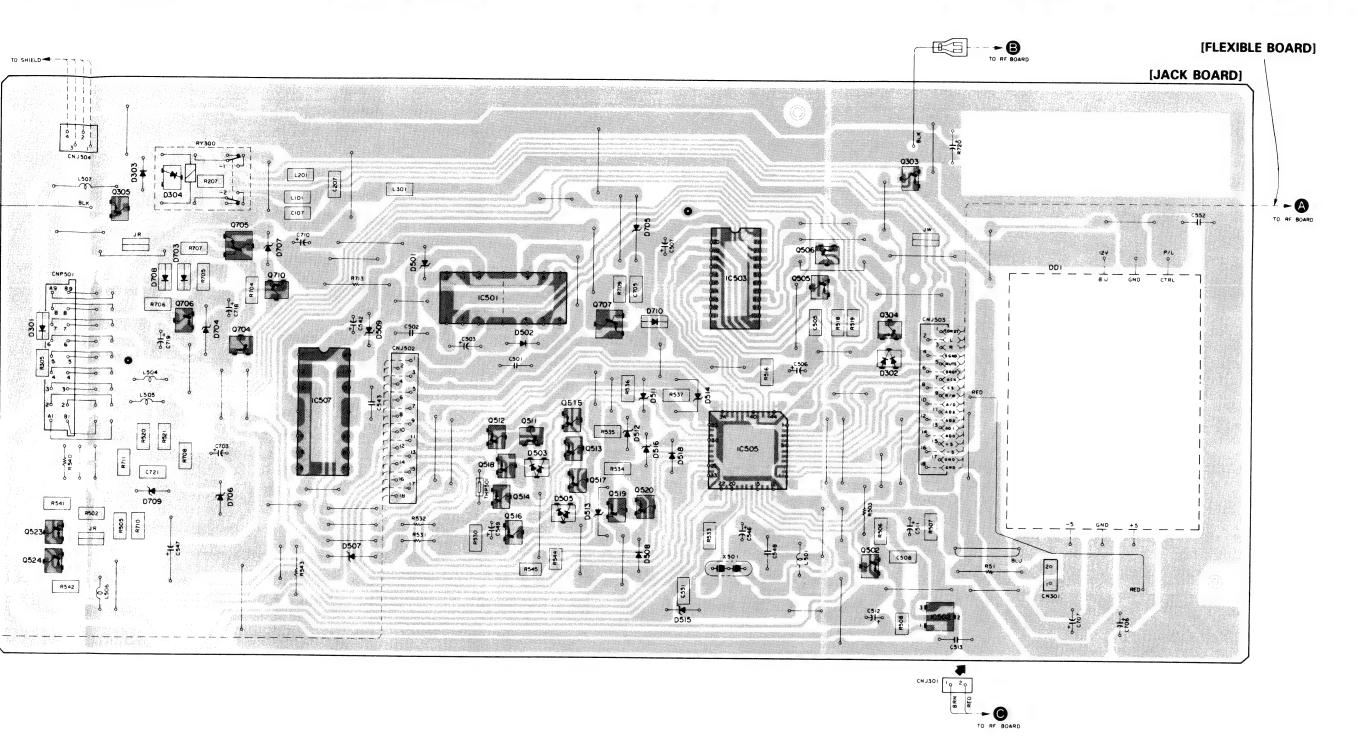




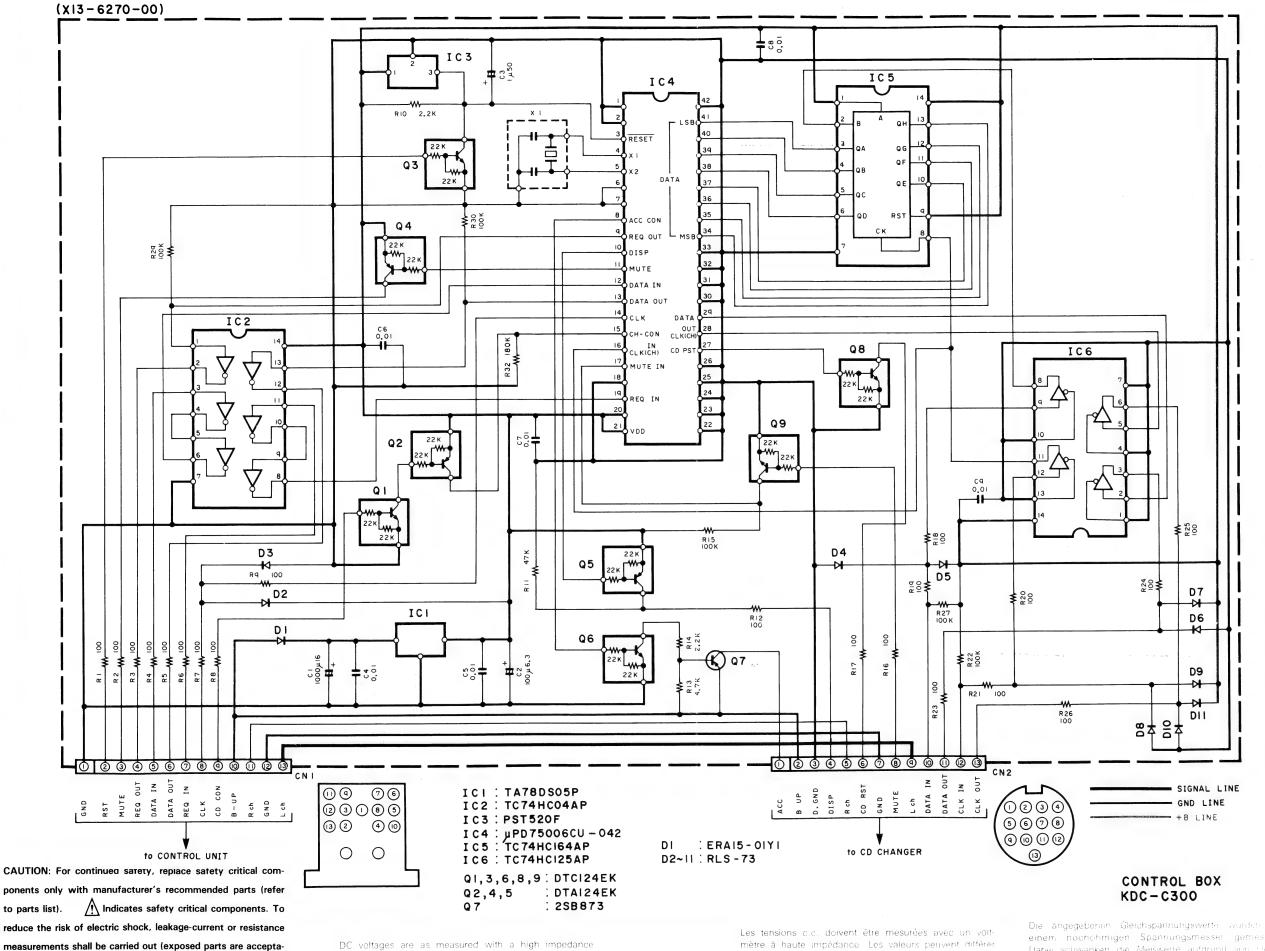
Refer to the schematic diagram for the values of resistors and capacitors.







Control unit



voltmeter. Values may vary slightly due to variations

between individual instruments or/and units

bly insulated from the supply circuit) before the appliance is

returned to the customer.

Die angegeberien Gleichspannungswerte wurden mit einem nochehmigen Spannungsmesser gemessen Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten über Geraten u.U. geringfügig

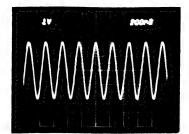
légèrement du fait des variations inhérentes aux

appareils et aux instruments de mesure individuels

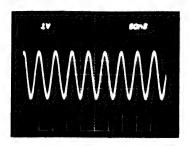
WAY

WAVEFORMS

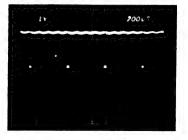
1 IC505 pin (8)



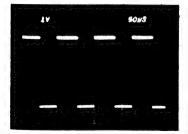
2 IC7 pin ①



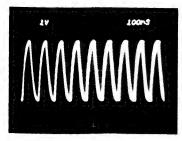
3 IC2 pin 34, IC3 pin 3



4 IC3 pin 4



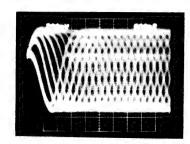
5 IC3 pin **8**



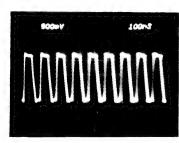
6 IC7 pin **1**3



7 IC1 pin (4)



8 IC2 pin 32



9 IC1 pin 32

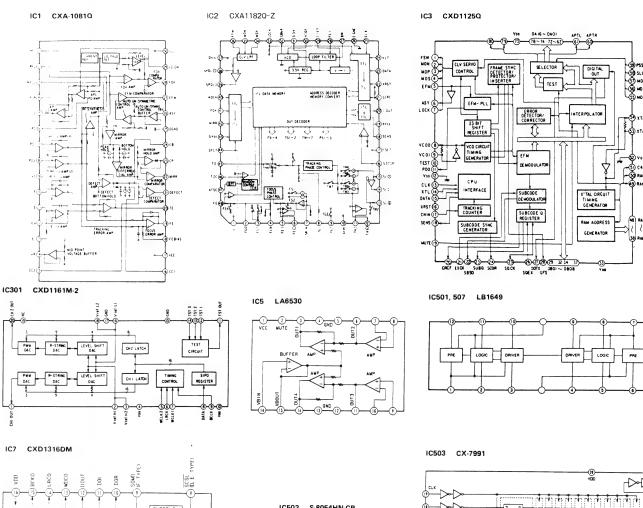


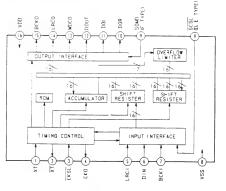
1 IC1 pin (1)

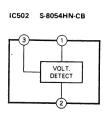


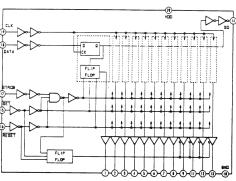
Q2, 3 emitter



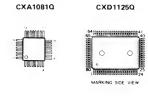








SEMICONDUCTOR LEAD LAYOUTS





CXK5816M-15L







DLS1585











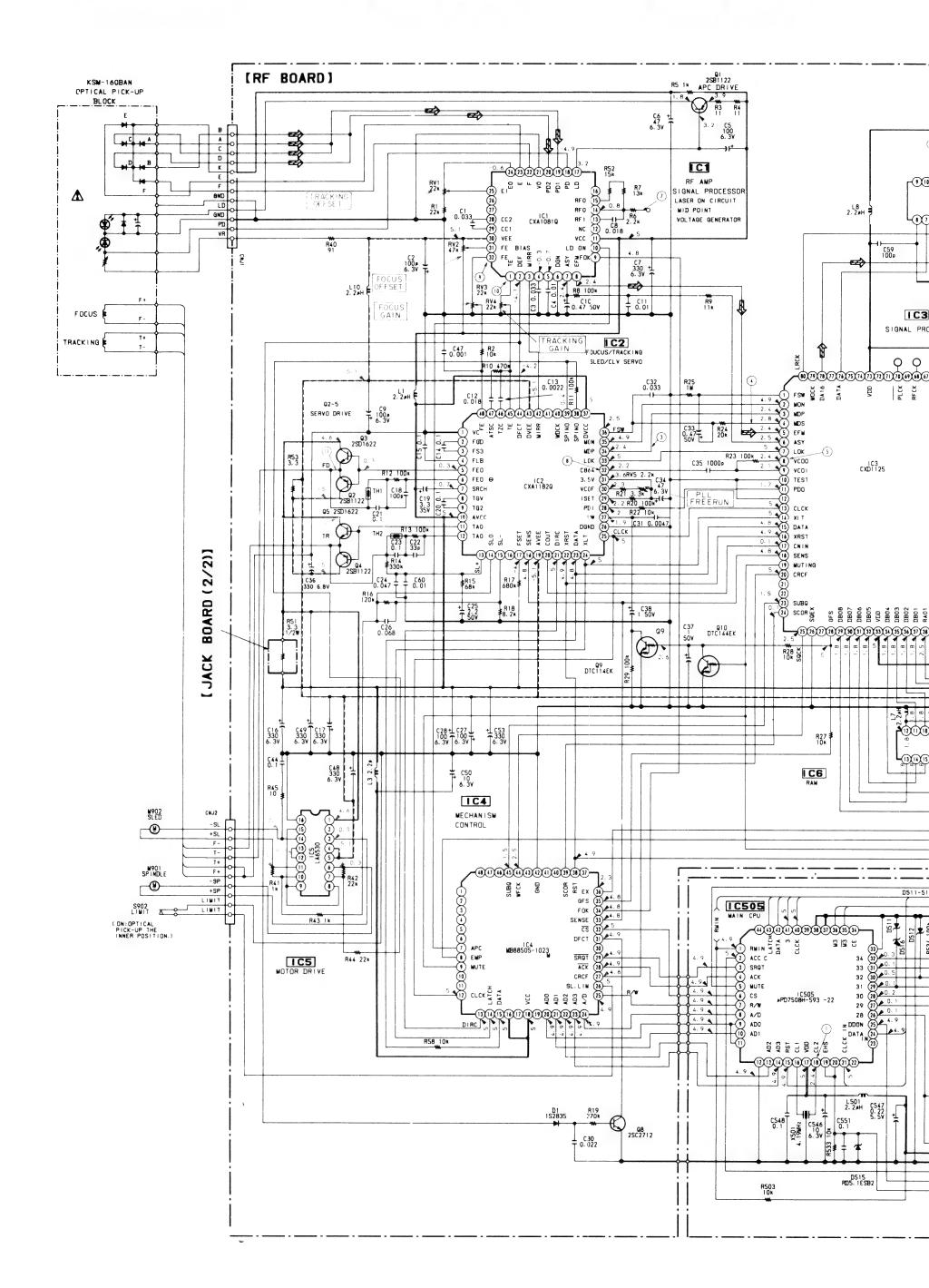
PH102-L

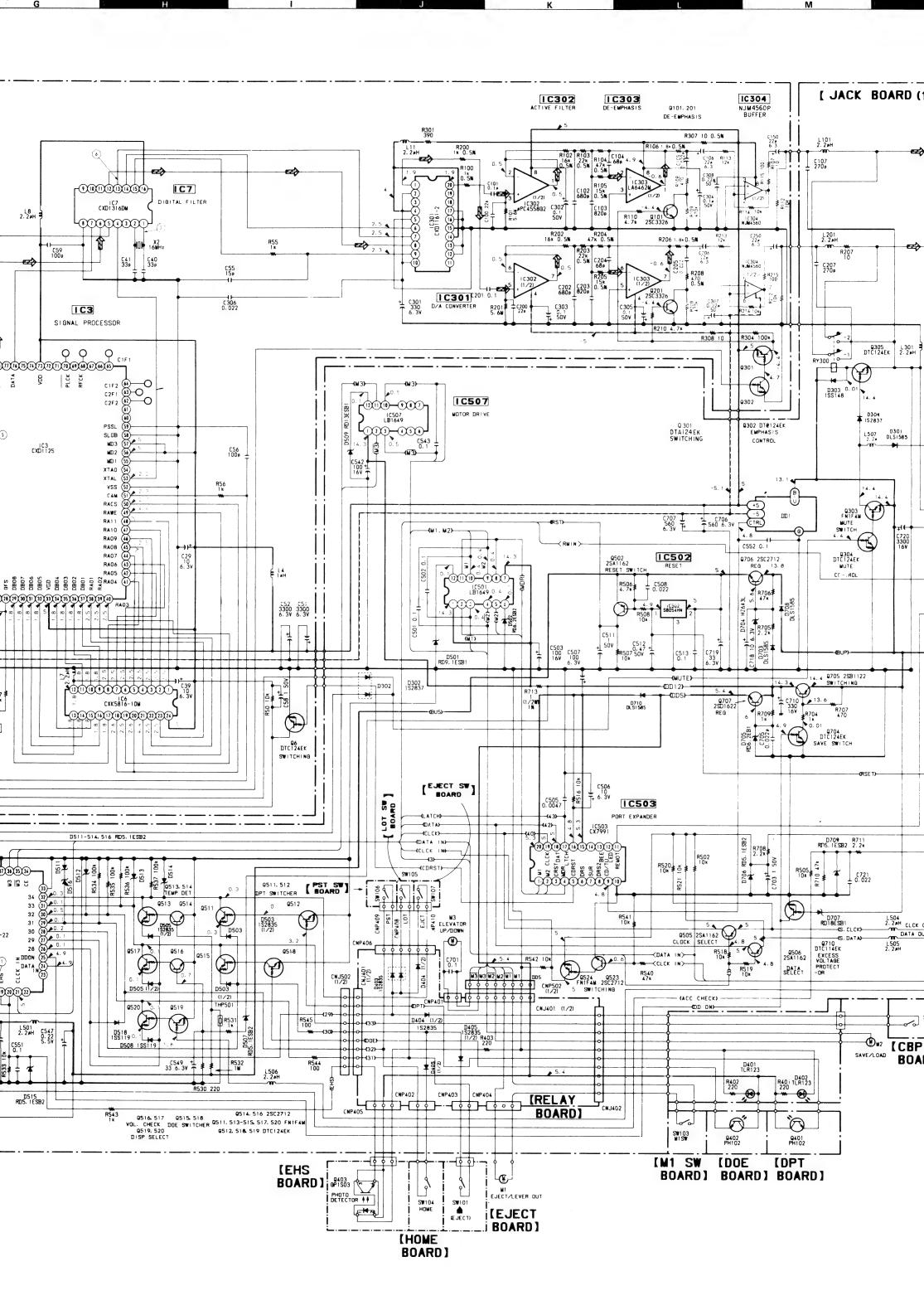


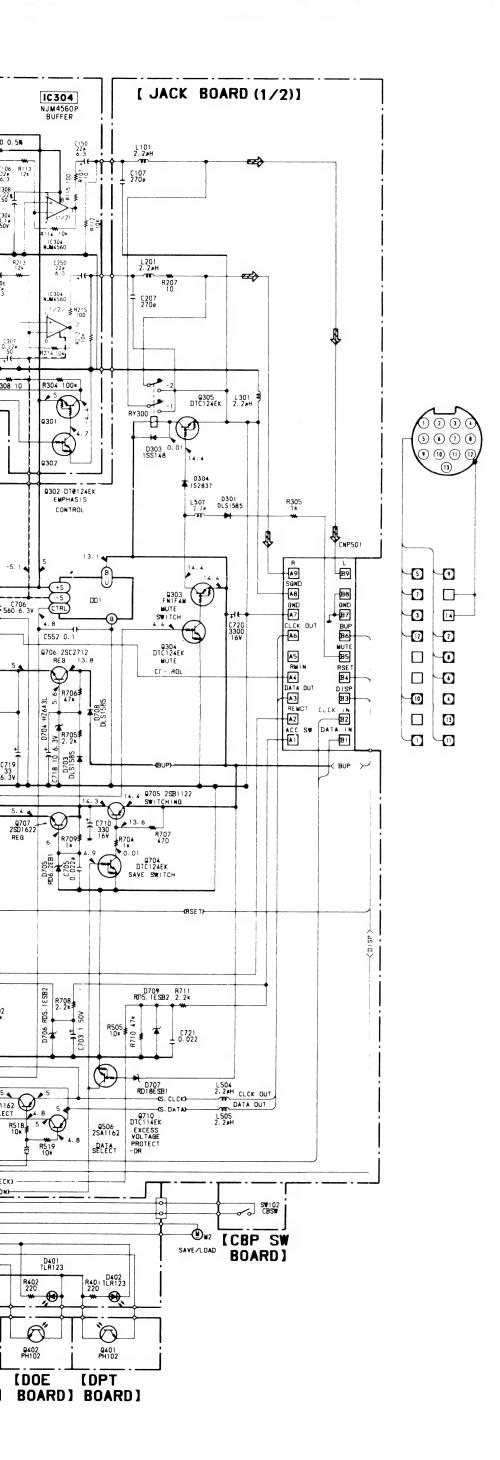
HZ6A2L

KDC-C300 KENWOOD

Y22-2182-72







CD signal line
+ B line
- B line

DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.

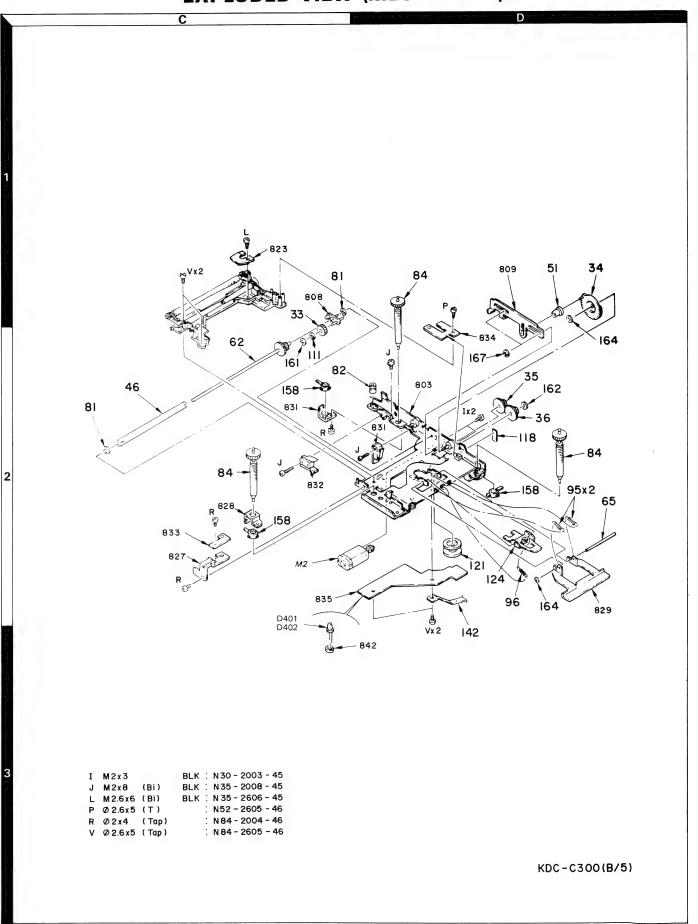
Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Spannungsmesser gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u.U. geringfügig.

KDC-C300 KDC-C300

EXPLODED VIEW (MECHANISM)

169x2 122x4 N09 - 2639 - 08 H M3x3 BLK : N30 - 3003 - 45 N30 - 2003 - 45 1 M2x3 K M2.6 x3 (Bi) N 35 - 2603 - 45 N Ø 2.6x5 (T) N52 - 2605 - 46 Q Ø 2x4 (Tap) BLK : N84 - 2004 - 45 T Ø 2.6x5 (Tap) BLK : N84 - 2605 - 45 N39 - 2020 - 41 X M2x2 W M2x5 (TP) N90 - 2005 - 46 KDC-C300(A/5)

EXPLODED VIEW (MECHANISM)

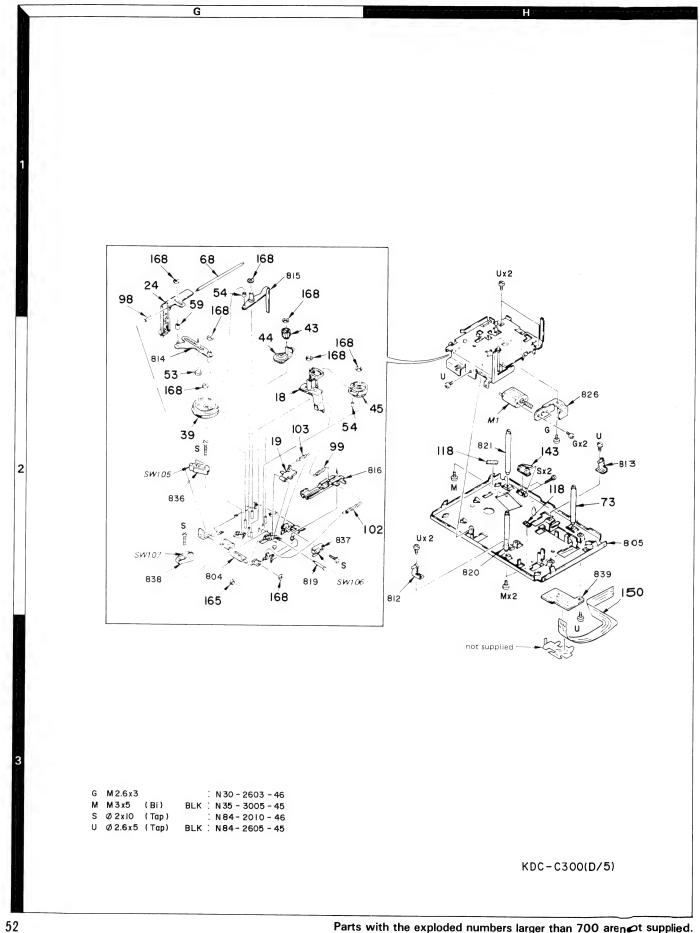


EXPLODED VIEW (MECHANISM)

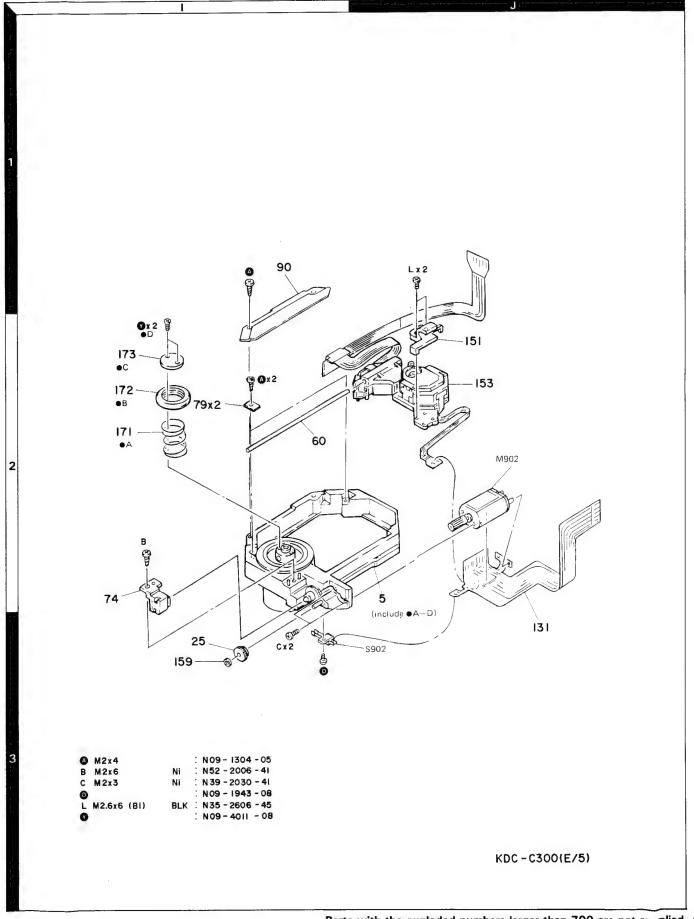
KDC-C300(C/5)

KDC-C300 KDC-C300

EXPLODED VIEW (MECHANISM)

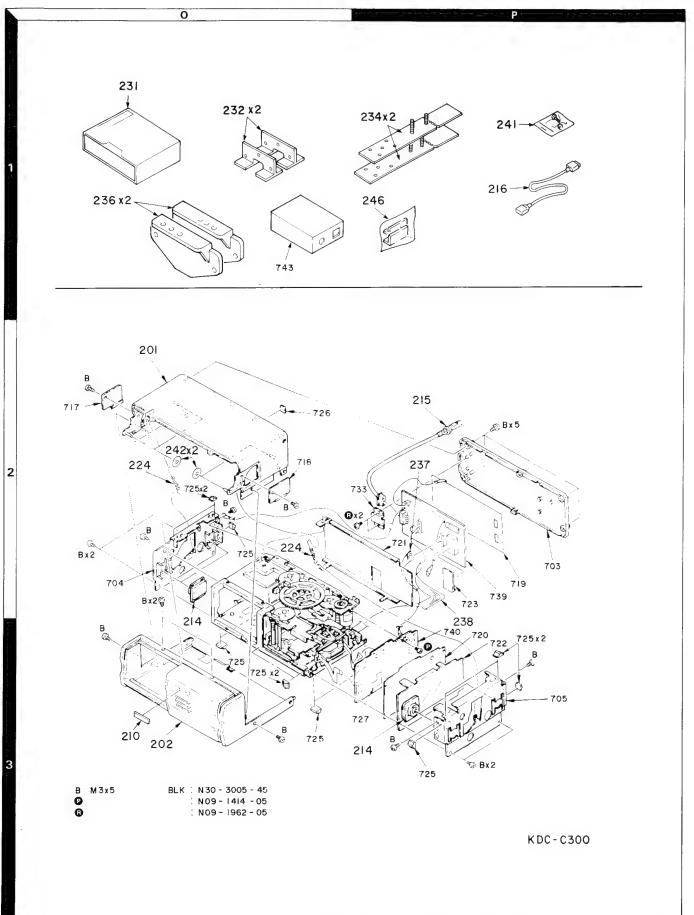


EXPLODED VIEW (MECHANISM)



Parts with the exploded numbers larger than 700 are not sup plied. 53

EXPLODED VIEW (UNIT)



54

PARTS LIST

* New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnes dans le Parts No. ne sont pas fournis.

Telle ohne Parts No. werden nicht geliefert.

Ref. No.	Address		Parts No.	Description	Desti- nation	Re- mark
参照番号	位 置	Parts 新	部品番号	部品名/規格		備老
KDC-C300						•
201 202	10 30	*	A01-2522-08 A20-7582-08	METALLIC CABINET DRESSING PANEL		
210 - - - -	30	*	B43-1203-04 B44-6005-04 B44-6006-04 B46-0100-20 B46-0172-03	KENWOOD BADGE UPC CODE LABEL UPC CODE LABEL WARRANTY CARD QUESTIONAIRE CARD	E	
		*	B46-0182-04 B50-7969-00 B58-0881-04	ID CARD INSTRUCTION MANUAL CAUTION CARD	Е	
214	30		D39-0202-08	DAMPER (OIL)		
215 216	1P 1P	*	E30-3894-08 E30-3834-05	CORD WITH CONNECTOR CORD WITH CASE(EXTENSION CORD)		
224	20		G01-2317-08	TENSION SP		
- - -		*	H01-9145-08 H03-3179-08 H10-3767-08 H10-3768-08 H25-0336-04	ITEM CARTON BOX(CHANGER) OUTER PACKING CASE POLYSTYRENE FOAMED FIXTURE(BOT POLYSTYRENE FOAMED FIXTURE(UPP PROTECTION BAG (170X250X0.03)		
231 232	10		J19-3110-08 J19-3174-08	DISC MAGAZINE MOUNTING FITTING (CHANGER)		
234 236 237 238	1P 10 2P 2P		J21-5462-08 J21-7075-08 J25-6030-08 J25-6031-08	MOUNTING PLATE (CHANGER) BRACKET FLEXIBLE BOARD (RF) FLEXIBLE BOARD (ELV)		
241 242 B P R	1P 20 3P 2P		N99-0285-08 N19-2014-08 N30-3005-45 N09-1414-05 N09-1962-05	SCREW SET WASHER (TEFLON) PAN HEAD MACHINE SCREW SCREW (/2.6X5) SCREW (/2.6X6)		
				OX (X13-6270-00)		
-			A01-2502-03 A10-2003-03	METALLIC CABINET CHASSIS CALKED ASSY		
C1 C2 C3 C4 -9			CE04DW1C102M CE04DW1A101M CE04DW1H010M CK73EB1H103K	ELECTRO 1000UF 16WV ELECTRO 100UF 10WV ELECTRO 1.0UF 50WV CHIP C 0.01UF K		
CN1 CN2			E08-1305-05 E06-1301-05	RECTANGULAR RECEPTACLE CYLINDRICAL RECEPTACLE		
-			H13-1509-03 H25-0333-04	CARTON BOARD PROTECTION BAG		
246	1P		J21-7021-05	MOUNTING HARDWARE		
X 1			L78-0501-05	RESONATOR		
-			N09-1203-05 N09-4003-05	SCREW SCREW		
J1 -12			R92-0338-05	CLYND CHIP R O OHM		

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J100,101 R1 -9 R10 R11 R12			R92-0338-05 RD41DB2B101J RD41DB2B222J RD41DB2B473J RD41DB2B101J	CLYND CHIP R O OHM CARBON 100 J 1/8W CARBON 2.2K J 1/8W CARBON 47K J 1/8W CARBON 100 J 1/8W	
R13 R14 R15 R16 -21 R22			RD41DB2B472J RD41DB2B222J RD41DB2B104J RD41DB2B101J RD41DB2B104J	CARBON 4.7K J 1/8W CARBON 2.2K J 1/8W CARBON 100K J 1/8W CARBON 100 J 1/8W CARBON 100K J 1/8W	
R23 -26 R27 R29 ,30 R32			RD41DB2B101J RD41DB2B104J RD41DB2B104J RD41DB2B184J	CARBON 100 J 1/8W CARBON 100K J 1/8W CARBON 100K J 1/8W CARBON 180K J 1/8W	
D1 D2 -11 IC1 IC2 IC3			ERA15-01Y1 RLS-73 TA78DS05P TC74HC04AP PST520F	DIODE DIODE IC(VOLTAGE REGULATOR/ +5V) IC IC(LOW POWER RESET)	
IC4 IC5 IC6 Q1		*	UPD75006CU-042 TC74HC164AP TC74HC125AP DTC124EK DTA124EK	IC(MICROPROCESSOR) IC(8BIT SHIFT REGISTER) IC DIGITAL TRANSISTOR DIGITAL TRANSISTOR	
Q3 Q4 ,5 Q6 Q7 Q8 ,9			DTC124EK DTA124EK DTC124EK 2SB873 DTC124EK	DIGITAL TRANSISTOR DIGITAL TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR DIGITAL TRANSISTOR	
			ELECT	RIC CIRCUIT	
C1 C2 C3 C4 C5			CK73EB1H333K CE04NW0J101M CK73EB1H333K CK41DY1C103K CE04NW0J101M	CHIP C 0.033UF K ELECTRO 100UF 6.3WV CHIP C 0.033UF K CYLND CHIP C 0.010UF K ELECTRO 100UF 6.3WV	
C6 C7 C8 C9 C10			CE04NW0J470M CE04NW0J331M CK73EB1H183K CE04NW0J101M CE04NW1HR47M	ELECTRO 47UF 6.3WV ELECTRO 330UF 6.3WV CHIP C 0.018UF K ELECTRO 100UF 6.3WV ELECTRO 0.47UF 50WV	
C11 C12 C13 C14 ,15 C16 ,17			CK41DY1C103K CK73EB1H183K CK73FB1H222K CK73EB1E104K CE04NW0J331M	CYLND CHIP C 0.010UF K CHIP C 0.018UF K CHIP C 2200PF K CHIP C 0.10UF K ELECTRO 330UF 6.3WV	
C18 C19 C20 ,21 C22 C23			CC73FSL101J CE04NW1E3R3M CK73EB1E104K CC73FCH1H330J CK73EB1E104K	CHIP C 330UF ELECTRO 3.3UF 25WV CHIP C 0.10UF K CHIP C 33PF J CHIP C 0.10UF K	
024 025 026 027 ,28			CK73FF1H473K CE04NW1H2R2M CK73EB1E683K CE04NW0J101M CE04NW0J100M	CHIP C 0.047UF K ELECTRO 2.2UF 50WV CHIP C 0.068UF K ELECTRO 100UF 6.3WV ELECTRO 10UF 6.3WV	

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参照番号	位 置	新	部品番号	部品	名/規	格	仕 向	備考
C30 C31 C32 C33 C34		nere en de lacuez de messagain de copie de constituto de una	CK73FB1H223K CK73FB1H472K CK73EB1H333K CE04NW1HR47M CE04NW0J470M	CHIP C CHIP C CHIP C ELECTRO ELECTRO	0.022UF 4700PF 0.033UF 0.47UF 47UF	K K K 50WV 6.3WV		
C35 C36 C37,38 C39 C40,41			CK73FB1H102K CE04NW0J331M CE04CW1H010M CE04NW0J100M CC73FCH1H330J	CHIP C ELECTRO ELECTRO ELECTRO CHIP C	1000PF 330UF 1.0UF 10UF 33PF	K 6.3WV 50WV 6.3WV J		
C44 C47 C48,49 C50 C51,52			CK73EB1E104K CK73FB1H102K CE04NW0J331M CE04NW0J100M C90-2514-08	CHIP C CHIP C ELECTRO ELECTRO ELECTRO	0.10UF 1000PF 330UF 10UF 3300UF	K K 6.3WV 6.3WV		
C53 C55 C56 C58 C59	-		CE04NW0J331M CC73FSL1H150J CC73FSL1H101J CE04NW1H010M CC73FSL1H101J	ELECTRO CHIP C CHIP C ELECTOR CHIP C	330UF 15PF 100PF 1.0UF 100PF	6.3WV J J 50WV J		
C60 C100 C101 C102 C103			CC73FB1H103K CC73FCH1H220J C93-1015-08 CC73FB1H681K CC73FB1H821K	CHIP C CHIP C CHIP C CHIP C	0.010UF 22PF 0.10UF 680PF 820PF	K J 125WV K K		
C104 C105 C106 C107 C150		*	CC73FSL1H680J CK41DF1H223Z CE04CW0J220M CC73FSL1H271J C92-1013-08	CHIP C CYLND CHIP C ELECTRO CHIP C ELECTRO	68PF 0.022UF 22UF 270PF 22UF	J Z 6.3WV J 6.3WV		
C200 C201 C202 C203 C204		*	CC73FCH1E220J C93-1015-08 CC73FB1H681K CC73FB1H821K CC73FSL1H680J	CHIP C CHIP C CHIP C CHIP C	22PF 0.10UF 680PF 820PF 68PF	J 125WV K K J		
C205 C206 C207 C250 C301		*	CK41DF1H223Z CE04CW0J220M CC73FSL1H271J C92-1013-08 CE04NW0J331M	CYLND CHIP C ELECTRO CHIP C ELECTRO ELECTRO	0.022UF 22UF 270PF 22UFF 330UF	Z 6.3WV J 6.3WV 6.3WV		
C302-305 C306 C307,308 C501,502 C503		*	CE04NW1H2R2M C91-0684-05 C92-1014-08 CF92V1H104J C90-1263-05	ELECTRO CERAMIC CERAMIC MF ELECTRO	2.2UF 0.022UF 0.22UF 0.10UF 100UF	50WV K 50WV J 16WV		
C505 C506 C507 C508 C511			CK41DX1C472M CE04NW1C100M CE04NW0J101M CK41DF1E223Z CE04CW1H010M	CYLND CHIP C ELECTRO ELECTRO CYLND CHIP C ELECTRO	10UF 100UF	M 16WV 6.3WV Z 50WV		
C512 C513 C542 C543 C546			CE04NW1HR47M CF92V1H104J C90-1263-05 CF92V1H104J CE04NW0J100M	ELECTRO MF ELECTRO MF ELECTRO	0.47UF 0.10UF 100UF 0.10UF 10UF	50WV J 16WV J 6.3WV	a construction of the cons	

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C547 C548 C549 C551 C552			C90-2515-08 CF92V1H104J CE04NW0J330M CK73EB1E104K CF92V1H104J	ELECTRO 0.22F MF 0.10UF ELECTRO 33UF CHIP C 0.10UF MF 0.10UF	5.5WV J 6.3WV K J		
C701 C703 C705 C706 C710			CF92V1H104J CE04CW1H010M CK73EB1H223K C90-2516-08 C90-1732-08	MF 0.10UF ELECTRO 1.0UF CHIP C 0.022UF ELECTRO 560UF ELECTRO 330UF	J 50WV K 6.3WV 16WV		
C718 C719 C720 C721			CE04NW1C100M CE04NW0J330M C90-1733-08 CK41DF1E223Z	ELECTRO 10UF ELECTRO 33UF ELECTRO 3300UF CYLND CHIP C 0.022UF	16WV 6.3WV 16WV Z		
L1 L3 L4 L7 ,8 L10			L40-2292-17 L40-2292-17 L39-0168-08 L39-0169-08 L40-2292-17	SMALL FIXED INDUCTOR SMALL FIXED INDUCTOR COIL COIL SMALL FIXED INDUCTOR	(2.2UF) (2.2UF) (1.0UH) (2.2UH) (2.2UH)		
L11 L101 L201 L301 L501			L39-0169-08 L39-0169-08 L39-0169-08 L39-0169-08 L40-2292-17	COIL COIL COIL COIL SMALL FIXED INDUCTOR	(2.2UH) (2.2UH) (2.2UH) (2.2UH) (2.2UH)		
L504-507 X2 X501			L40-2292-17 L77-1133-08 L78-0250-08	SMALL FIXED INDUCTOR CRYSTAL RESONATOR RESONATOR	(2.2UH)		
JR1 JR2 JR550-552 R1 R2			R92-0338-05 R92-0670-05 R92-0670-05 RK73FB2A223J RK73FB2A103J	CLYND CHIP R O 0HM CHIP R O 0HM CHIP R O 0HM CHIP R 22K CHIP R 10K	J 1/10W J 1/10W		
R3 ,4 R5 R6 R7 R8			RK73EB2B110J RK73FB2A102J RK73FB2A222J RK73FB2A133J RK73FB2A104J	CHIP R 11 CHIP R 1.0K CHIP R 2.2K CHIP R 13K CHIP R 100K	J 1/8W J 1/10W J 1/10W J 1/10W J 1/10W		
R9 R10 R11 -13 R14 R15			RK73FB2A113J RK73FB2A474J RK73FB2A104J RK73FB2A334J RK73FB2A683J	CHIP R 11K CHIP R 470K CHIP R 100K CHIP R 330K CHIP R 68K	J 1/10W J 1/10W J 1/10W J 1/10W J 1/10W		
R16 R17 R18 R19 R20			RK73FB2A124J RK73FB2A684J RK73FB2A822J RK73FB2A274J RK73FB2A104J	CHIP R 120K CHIP R 680K CHIP R 8.2K CHIP R 270K CHIP R 100K	J 1/10W J 1/10W J 1/10W J 1/10W J 1/10W		
R21 R22 R23 R24 R25			RK73FB2A332J RK73FB2A103J RK73FB2A104J RK73FB2A203J RK73FB2A105J	CHIP R 3.3K CHIP R 10K CHIP R 100K CHIP R 20K CHIP R 1.0M	J 1/10W J 1/10W J 1/10W J 1/10W J 1/10W		
R27 R28			RK73FB2A103J RK73EB2B103J	CHIP R 10K CHIP R 10K	J 1/10W J 1/8W		

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R29 R40 R41 R42 R43	九 国	新	RK73FB2A104J RK73FB2A910J RK73FB2A102J RK73FB2A223J RK73FB2A102J	CHIP R 100K CHIP R 91 CHIP R 1.0K CHIP R 22K CHIP R 1.0K	J J J J	1/10W 1/10W 1/10W 1/10W 1/10W	L IT J WE
R44 R45 R50 R51 R52			RK73EB2B223J RK73FB2A100J RK73FB2A103J RD14DB2H3R3J RK73FB2A153J	CHIP R 22K CHIP R 10 CHIP R 10K SMALL-RD 3.3 CHIP R 15K	J J J J	1/8W 1/10W 1/10W 1/2W 1/10W	
R53 R55 ,56 R58 R100 R101			RK73EB2B3R3J RK73FB2A102J RK73FB2A103J R92-2007-08 RK73EB2B565J	CHIP R 3.3 CHIP R 1.0K CHIP R 10K FIXED RESISTOR 1.0K CHIP R 5.6M	J J J	1/8W 1/10W 1/10W 1/10W 1/8W	
R102 R103 R104 R105 R106		*	R92-2003-08 R92-2004-08 R92-2005-08 R92-2006-08 R92-2054-08	FIXED RESISTOR 16K FIXED RESISTOR 22K FIXED RESISTOR 47K FIXED RESISTOR 15K FIXED RESISTOR 1.8K		1/10W 1/10W 1/10W 1/10W 1/10W	
R107 R108 R109 R110 R112		*	RK73FB2A100J R92-2055-08 RK73FB2A474J RK73FB2A472J RK73FB2A103J	CHIP R 10 FIXED RESISTOR 470 CHIP R 470K CHIP R 4.7K CHIP R 10K	J J J	1/10W 1/10W 1/10W 1/10W 1/10W	
R113 R114 R115 R200 R201		* * *	R92-2056-08 R92-2002-08 R92-2057-08 R92-2058-08 RK73EB2B565J	FIXED RESISTOR 12K FIXED RESISTOR 10K FIXED RESISTOR 100 FIXED RESISTOR 1K CHIP R 5.6M	J	1/10W 1/10W 1/10W 1/10W 1/8W	
R202 R203 R204 R205 R206		*	R92-2003-08 R92-2004-08 R92-2005-08 R92-2006-08 R92-2054-08	FIXED RESISTOR 16K FIXED RESISTOR 22K FIXED RESISTOR 47K FIXED RESISTOR 15K FIXED RESISTOR 1.8K		1/10W 1/10W 1/10W 1/10W 1/10W	
R207 R208 R209 R210 R212		*	RK73EB2B100J R92-2055-08 RK73FB2A474J RK73FB2A472J RK73FB2A103J	CHIP R 10 FIXED RESISTOR 470 CHIP R 470K CHIP R 4.7K CHIP R 10K	J J J	1/8W 1/10W 1/10W 1/10W 1/10W	
R213 R214 R215 R301 R304		*	R92-2056-08 R92-2002-08 R92-2057-08 RK73FB2A391J RK73FB2A104J	FIXEF RESISTOR 12K FIXEF RESISTOR 10K FIXEF RESISTOR 100 CHIP R 390 CHIP R 100K	J J	1/10W 1/10W 1/10W 1/10W 1/10W	
R305 R307,308 R401-403 R502 R503			RK73EB2B102J RK73EB2B100J RK73EB2B221J RK73EB2B103J RD41DB2B103J	CHIP R 1.0K CHIP R 10 CHIP R 220 CHIP R 10K CARBON 10K	J J J J	1/8W 1/8W 1/8W 1/8W 1/8W	
R505 R506 R507 R508 R516			RK73EB2B103J RK73EB2B472J RK73EB2B103J RK73FB2A103J RK73EB2B103J	CHIP R 10K CHIP R 4.7K CHIP R 10K CHIP R 10K CHIP R 10K	J J J J	1/8W 1/8W 1/8W 1/10W 1/8W	

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R518-521 R530 R531 R533 R534-537		RK73EB2B103J RK73EB2B221J RD41DB2B102J RK73EB2B103J RK73EB2B104J	CHIP R 10K J 1/8W CHIP R 220 J 1/8W CARBON 1K J 1/8W CHIP R 10K J 1/8W CHIP R 100K J 1/8W	
R540 R541,542 R543 R544,545 R704	*	R92-2059-08 RK73EB2B103J RD41DB2B102J RK73FB2A101J RK73EB2B102J	CAROBN 47K J 1/4W CHIP R 10K J 1/8W CARBON 1K J 1/8W CHIP R 100 J 1/10W CHIP R 1.0K J 1/8W	
R705 R706 R707 R708 R709		RK73EB2B222J RK73EB2B473J RK73EB2B471J RK73EB2B222J RK73EB2B102J	CHIP R 2.2K J 1/8W CHIP R 47K J 1/8W CHIP R 470 J 1/8W CHIP R 2.2K J 1/8W CHIP R 1.0K J 1/8W	
R710 R711 R713 RV1 RV2		RK73EB2B473J RK73EB2B222J R92-2009-08 R12-3097-05 R12-3099-05	CHIP R 47K J 1/8W CHIP R 2.2K J 1/8W FIXED RESISTOR 1.0 1/2W TRIMMING POT. 22K TRIMMING POT. 47K	
RV3 ,4 RV5		R12-3097-05 R12-1067-05	TRIMMING POT. 22K TRIMMING POT. 2.2K	
RY300 S902 SW101 SW102 SW103		S51-2086-08 S46-1107-08 S59-1085-08 S50-1050-08 S50-1051-08	RELAY LEAF SWITCH SWITCH SENSITIVE SWITCH SENSITIVE SWITCH	
SW104-107		S50-1052-08	SENSITIVE SWITCH	
D1 D301 D302 D303 D304		1S2835 1S2835 1S2837 1SS119 1S2837	DIODE DIODE DIODE DIODE DIODE	
D401,402 D403-405 D501 D502 D503		TLR123 1S2835 RD9.1ES(B1) RD6.2ES(B2) 1S2835	LED DIODE ZENER DIODE ZENER DIODE DIODE	
D505 D507 D508 D509 D511-516		1S2835 RD5.1ES(B2) 1SS119 RD13ES(B1) RD5.1ES(B2)	DIODE ZENER DIODE DIODE ZENER DIODE ZENER DIODE	
D518 D703 D704 D705 D706		1SS119 DLS1585 HZ6A2L RD6.2ES(B2) RD5.1ES(B2)	DIODE DIODE DIODE ZENER DIODE ZENER DIODE	
D707 D708 D709 D710 IC1		RD18ES(B1) DLS1585 RD5.1ES(B2) DLS1585 CXA1081Q	ZENER DIODE DIODE ZENER DIODE ZENER DIODE IC(SERVO SIGNAL PROCESSOR)	

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参照番号	位 置	新	部品番号	部品名/規格	仕 向	備考
IC2 IC3 IC4 IC5 IC6			CXA11829-Z CXD11259 MB88505H-1023M LA-6530 CXK5816M-15L	IC(SERVO SIGNAL PROCESSOR) IC(DIGITAL SIGNAL PROCESSOR) IC(MICROPROCESSOR) IC IC(16K SRAM SLOW)		
IC7 IC301 IC302 IC303 IC304			CXD1316DM CXD1161M-2 UPC4558G2 LA6462M NJM4560M	IC(DIGITAL FILTER) IC(D/A CONVERTER) IC IC(OP AMP X2) IC(OP AMP X2)		
IC501 IC502 IC503 IC505 IC507			LB1649 S-8054HN-CB CX7991 7508HG-593-22 LB1649	IC(MOTOR DRIVER) IC(VOLTAGE DETECTOR) IC IC(MICROPROCESSOR) IC(MOTOR DRIVER)		The state of the s
Q1 Q2 Q3 Q4 Q5			2SB1122 2SB1115A 2SD1622 2SB1115A 2SD1622	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR		
Q6 Q8 Q9 Q10 Q101			DTC124EK 2SC2712G DTC114EK DTC144EK 2SC3326N	DIGITAL TRANSISTOR TRANSISTOR DIGITAL TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR		
Q201 Q301 Q302 Q303 Q304,305			2SC3326N DTA124EK DTC124EK 2SA1342 DTC124EK	TRANSISTOR DIGITAL TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR DIGITAL TRANSISTOR		
Q401,402 Q403 Q502 Q505 Q506			PH102 GP-1503 2SA1162 2SA1162 2SA1162Y	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR		
Q511 Q512 Q513 Q514 Q515			2SA1342 DTC124EK 2SA1342 2SC2712Y 2SA1342	TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR		
Q516 Q517 Q518,519 Q520 Q523			2SC2712Y 2SA1342 DTC124EK 2SA1342 2SC2712G	TRANSISTOR TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR TRANSISTOR		
Q524 Q704 Q705 Q706 Q707			2SA1342 DTC124EK 2SB1122 2SC2712G 2SD1622	TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR		
9710 TH1 ,2 THP501			DTC114EK ERT-D2FHJ802T PTH59F04BG222TS	DIGITAL TRANSISTOR THERMISTOR THERMISTOR		
DD1			W02-0960-08	DC-DC CONVERTOR		

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参照番号	A. Press	部品番号	部品名/規格	仕 向備者
		MECHA	ANISM ASS'Y	
A B C D E	2I 2I 3I 3I 1J	N09-1304-05 N52-2006-41 N39-2030-41 N09-1943-08 N09-1944-08	SCREW SCREW SCREW SCREW SCREW	
F G H I J	2B	N09-2639-08 N30-2603-46 N30-3003-45 N30-2003-45 N35-2008-45	SCREW PAN HEAD MACHINE SCREW PAN HEAD MACHINE SCREW PAN HEAD MACHINE SCREW BINDING HEAD MACHINE SCREW	
K L M N P		N35-2603-45 N35-2606-45 N35-3005-45 N52-2605-46 N52-2605-46	BINDING HEAD MACHINE SCREW BINDING HEAD MACHINE SCREW BINDING HEAD MACHINE SCREW PAN HEAD TAPPING SCREW PAN HEAD TAPPING SCREW	
Q R S T U		N84-2004-45 N84-2004-46 N84-2010-46 N84-2605-45 N84-2605-45	SCREW SCREW SCREW SCREW SCREW	
V W X Y	11	N84-2605-46 N90-2005-46 N39-2020-41 N09-4011-08	SCREW TP HEAD MACHINE SCREW SCREW SCREW	
5 6 18 19 23	2I 2A 2G 2G 2E	A15-0601-08 B07-1860-08 D10-2265-08 D10-2266-08 D10-2268-08	FRAME ASSY (MD SLED) ESCUTCHEON LEVER ASSY (SOFT EJECT) LEVER (BACK LOCK HOOK LEVER (DISC LINK)	
24 25 26 30 31	1G 3I 2A 1A 1B	D10-2269-08 D13-0671-18 D13-0760-08 D13-0761-08 D13-0762-08	SLIDER ASSY (LINEAR) GEAR (B) GEAR (ELEVATOR) GEAR (ELEVATOR) GEAR (ELEVATOR)	
32 33 34 35 36	2B 2C 1D 2D 2D	D13-0763-08 D13-0764-08 D13-0765-08 D13-0766-08 D13-0767-08	GEAR (MOTOR) GEAR (E) GEAR (F) GEAR (A) GEAR (B)	
37 38 39 43	1F 2F 2G 2G 2G	D13-0768-08 D13-0769-08 D13-0770-08 D13-0771-08 D13-0772-08	GEAR (G) (ROLLER) GEAR (ROLLER STEP) GEAR GEAR (WORM WHEEL) GEAR ASSY	
45 46 50 51 52	2G,2H 2C,2E 2A 1D 2E	D13-0773-08 D14-0269-08 D14-0289-08 D14-0290-08 D14-0291-08	GEAR (EJECT CAM) ROLLER (LOWER) ROLLER (MAGAZINE) ROLLER (IDEL) ROLLER ASSY (UPPER)	
53 54 59 62	2G 2G 1G 2C	D14-0292-08 D14-0293-08 D14-0295-08 D21-1507-08	ROLLER (A) ROLLER ROLLER SHAFT ASSY (POLLER)	

E: Scandinavia & Europe K: USA

U: PX(Far East, Hawaii) T: England M: Other Areas

P: Canada W:Europe

UE: AAFES(Europe) X: Australia

PARTS LIST

× New Parts

Parts Without Parts No. are not supplied.

Les articles non mentionnes dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

Ref. No.	Address New	Parts No.	Description		Re- marks
参照番号	位置 新	部品番号	部品名/規格		備考
65 66 67 68 74	2D 2F 2F 1G 2I	D21-1508-08 D21-1509-08 D21-1510-08 D21-1511-08 D23-0232-08	SHAFT (DISC CHUCK) SHAFT (SIDE ROLLER) SHAFT ASSY (UPPER ROLLER) SHAFT (LINEAR SLIDER) RETAINER ASSY		
78 79 80 81 82	2J 2I 2A,2B 2C 2C	D23-0233-08 D23-0234-08 D23-0239-08 D23-0240-08 D23-0241-08	RETAINER RETAINER RETAINER RETAINER (MAIN ROLLER) RETAINER		
84 90 95 96 97	2C 2I 2D 3D 2E,2F	D29-0017-08 F07-0523-08 G01-2318-08 G01-2319-08 G01-2320-08	SCREW ASSY (FEED) COVER TENSION SP TENSION SP TENSION SP		
98 99 102 103 104	1G 2G 2G 2G 2C,2D	G01-2321-08 G01-2322-08 G01-2323-08 G01-2324-08 G01-2325-08	COMPRESSION SP TENSION SP TENSION SP TENSION SP COMPRESSION SP	147.00	
105 108 109 110	1I,1J 1A 1A 1A 2C	G02-0466-08 G02-0906-08 G02-0907-08 G02-0908-08 G02-0909-08	LEAF SPRING ASSY LEAF SPRING LEAF SPRING LEAF SPRING LEAF SPRING		
112 115 116 117 118	2H 2B 2C 3H 2D	G11-1315-08 G11-1323-08 G11-1323-08 G11-1323-08 G11-1427-08	CUSHION CUSHION CUSHION CUSHION CUSHION		
121 122 124 131 142	3D 2B 3D 2J 3D	J11-0138-08 J11-0139-08 J19-3103-08 J25-7057-08 J25-6047-08	CLAMPER CLAMPER BRACKET PRINTED WIRING BOARD (FLEXIBLE PRINTED WIRING BOARD		
143 150 151 152 153	2H 3H 2J 2F 2J	J25-6048-08 J25-7056-08 J90-0705-08 J90-0628-08 J91-0346-08	PRINTED WIRING BOARD PRINTED WIRING BOARD GUIDE GUIDE PICK UP		
155 156 158 159 160	2A 2I 2C 31 2E	K24-0054-08 E29-0331-08 N14-0185-08 N19-1120-08 N19-1189-08	KNOB (EJECT) LEAD PLATE NUT FLAT WASHER FLAT WASHER (0.5X5.5X2.1)		
161 162 163 164 165	2C 2D 2A 3D 3G	N19-1190-08 N19-1192-08 N24-3015-45 N24-3015-45 N24-3015-45	FLAT WASHER FLAT WASHER E TYPE RETAINING RING (φ1.5) E TYPE RETAINING RING (φ1.5) E TYPE RETAINING RING (φ1.5)		
166 167 168 169 171	1F,2F 2D 2G 1B 2I	N24-3015-45 N24-3020-45 N24-3020-45 N24-3025-45 G01-2523-08	E TYPE RETAINING RING (φ1.5) E TYPE RETAINING RING (φ2.0) E TYPE RETAINING RING (φ2.0) E TYPE RETAINING RING SPRING, COMPRESSION		

E: Scandinavia & Europe K: USA

P: Canada W:Europe

U: PX(Far East, Hawaii) T: England M: Other Areas UE : AAFES(Europe) X: Australia

⚠ indicates safety critical components.

¥ New Parts

PARTS LIST

Parts without Parts No. are not supplied.

Les articles non mentionnes dans le Parts No. ne sont pas fournis.

Telle ohne Parts No. werden nicht geliefert.

Ref. No. 参照番号	Address New Part 位置新	s	Description 部 品 名 / 規 格	nation	Re- marks 備考
172 173 M1 M2 M3	2I 2I 2H 3C 2B	D32-0601-08 J90-0704-08 T42-0512-08 T42-0511-08 T42-0510-08	STOPPER, RING RING, CENTER MOTOR ASSY DC MOTOR ASSY DC MOTOR		
M902 S902 SW105 SW106 SW107	2J 3J 2G 2G 2G	T42-0709-08 S46-1107-08 S50-1052-08 S50-1052-08 S50-1052-08	MOTOR ASSY LEAF SWITCH (LIMIT) MICRO SWITCH (LOT) MICRO SWITCH (PST) MICRO SWITCH (EJECT)		

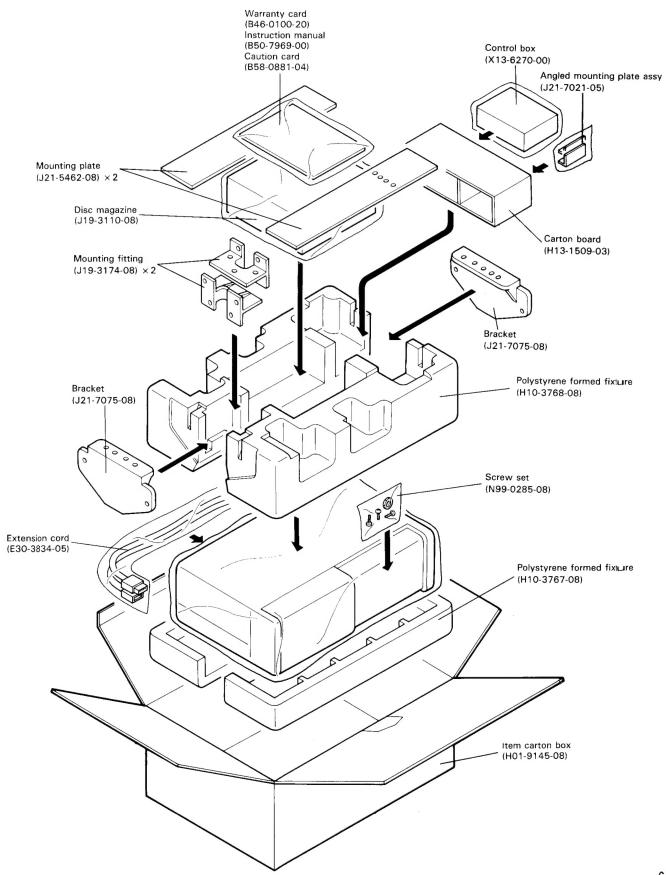
E: Scandinavia & Europe K: USA

P: Canada W:Europe

U: PX(Far East, Hawaii) T: England M: Other Areas

UE : AAFES(Europe) X: Australia

PACKING



SPECIFICATIONS

Disc Section Laser Diode Digital Filter (D/A) Sampling Frequency Conversion Rate	16 bit (Linear) 44.1 kHz
Spindle Speed Wow & Flutter Frequency Response (±1 dB). Total Harmonic Distortion (1 kHz) Signal to Noise Ratio Dynamic Range Channel Separation. Laser Diode Properties	Below Measurable Limit 5 Hz ~ 20 kHz 0.005% 85 dB 85 dB
Material	780 nm Continuous

^{*} This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block.

General

Operating Voltage	14.4 V (11~16 V)
Current Consumption	0.8 A
Operating Temperature	
Installation Size (W×H×D)	$302 \times 100 \times 209 \text{ mm}$
	$(11-7/8 \times 3-7/8 \times 7-7/8 \text{ in.}$
Weight	3.0 kg (6.6 lb)

KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

KENWOOD poursuit une politique de progrès constants en ce qui concerne le développement. Pour cette raison, les spécifications sont sujettes à modifications sans préavis.

KENWOOD strebt ständige, Verbesserungen in der Entwicklung an. Daher bleiben Änderungen der technischen Daten jederzeit vorbehalten.

Note:

Component and circuitry are subject to modification to insure best operation under differing local conditions. This manual is based on, the U.S. (K) standard, and provides information on regional circuit modification through use of alternate schematic diagrams, and information on regional component variations through use of parts list.

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